

DURBAN CORPORATION



REPORT

OF

MUNICIPAL OFFICER of HEALTH

FOR THE

Financial Year ended 31st July, 1916.

DURBAN

J. DAVIS & SONS, LIMITED, Printers, Grey and Saville Streets

1917.

MEDICAL OFFICER'S REPORT.

Municipal Buildings,

Durban. 1st August, 1916.

TO HIS WORSHIP THE MAYOR

AND TOWN COUNCILLORS OF THE BOROUGH OF DURBAN.

GENTLEMEN,

I have the honour to submit to you my Fourteenth Annual Report relating to the Health and Sanitary Conditions of the Borough of Durban, for the year ended 31st July, 1916.

P. MURISON, M.D., B.Sc., D.P.H.,

Medical Officer of Health.

POPULATION.

The following table shows the estimated population for 1915-16, and previous Census of the Borough for comparison are shown.

		1910 Borough Census	1911 Government Census	1913 Borough Census	1916 Estimate
Europeans ...	...	30,030	31,896	33,428	36,400
Coloured ...	...	2,039	} 19,535	2,420	3,100
Asiatics ...	...	16,131		18,010	19,400
Natives ...	...	16,489	17,756	20,302	20,800
		64,689	69,187	74,160	79,700

TABLE SHOWING ESTIMATED POPULATION IN WARDS
(EUROPEANS), 1915-16.

Wards ...	...	1	2	3	4	5	6	7	Total.
Population ...	...	4,622	5,384	7,697	3,835	7,634	3,260	7,068	39,500

For Public Health Purposes, the "Coloured" population is included with the European, and the Birth Rates, Death Rates, etc., shown in this Report as European are calculated on the combined figures.

BIRTHS.

1.—TABLE SHOWING MONTHLY DISTRIBUTION OF ALL BIRTHS
FOR RACE AND SEX, 1915-16.

MONTHS.	MALES.			FEMALES.			TOTALS.		
	Europeans	Natives	Asiatics	Europeans	Natives	Asiatics	Europeans	Natives	Asiatics
1915									
August ...	35	1	34	40	0	44	75	1	78
September ...	39	1	22	31	0	19	70	1	41
October ...	39	0	20	51	0	31	90	0	51
November ...	31	0	21	36	0	24	67	0	45
December ...	37	0	30	31	1	29	68	1	59
1916									
January ...	39	0	33	47	0	30	86	0	63
February ...	35	2	39	31	0	39	66	2	68
March ...	39	0	27	38	1	37	77	1	64
April ...	40	1	25	40	0	18	80	1	43
May ...	42	0	26	44	1	25	86	1	51
June ...	37	1	25	34	0	30	71	1	55
July ...	44	0	23	41	0	26	85	0	49
Totals ...	457	6	325	464	3	342	921	9	667

Ward Distribution of Births in 1917 Report



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<https://archive.org/details/b31486538>

2.—TABLE OF BIRTHS OCCURRING AMONGST NON-RESIDENTS
IN MONTHS.

[illegible]

1915										1916															
Aug.		Sept.		Oct.		Nov.		Dec.		Jan.		Feb.		Mar.		April.		May.		June.		July.		Total.	
M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F
6	5	6	2	5	3	4	2	6	4	3	2	6	5	9	5	6	3	7	9	9	12	5	9	72	61

European Birth Rate (gross)	26.7	per 1,000
European Birth Rate (corrected) for non-residents	23.3	„
Asiatic Birth Rate	34.4	„
Native Birth Rate ... ..	.4	„
Birth Rate England and Wales, 1915	21.9	„

3.—TABLE SHOWING TOTAL REGISTERED EUROPEAN BIRTHS
AND BIRTH RATES FOR THE PAST SEVEN YEARS.

	1910	1911	1912	1913	1914	1915	1916	1916
No. of Births	907	952	1030	1015	1030	1025	1054	921
Birth Rate	28.5	27.7	28.3	28.3	28.1	27.4	26.7	23.3

[Corrected]

4.—TABLE SHOWING LEGITIMATE AND ILLEGITIMATE BIRTHS,
EXCLUDING IMPORTED BIRTHS, 1915-16.

	Males.	Females.	Total.
Legitimate	444	448	892
Illegitimate	13	16	29
	<hr/>	<hr/>	<hr/>
	457	464	921

MARRIAGES CONTRACTED IN DURBAN BOROUGH, 1915-16.

During the past Municipal Year 494 European Marriages were contracted in Durban. The following table shows the distribution as to domicile of contracting parties :

Of whom one party domiciled in Durban.		Of whom both parties domiciled in Durban.		Of whom neither party domiciled in Durban.	
M.	F.	M.	F.	M.	F.
17	64	368	368	45	45

Gross Marriage Rate for Durban	12.5 per 1,000
Corrected Marriage Rate for Durban	11.4 per 1,000

DEATHS.

1.—TABLE SHOWING RACE AND SEX DISTRIBUTION OF DEATHS
DURING THE PAST YEAR.

Race.	Male.	Female.	Total.
European	191	160	351
Native	106	39	145
Asiatic	103	77	180
Totals	400	276	676

2.—AGE DISTRIBUTION OF DEATHS (EUROPEANS).

	Male.	Female.	Total.
Under 1 year	40	45	85
1—5 years	17	15	32
5—10 „	2	3	5
10—15 „	4	2	6
15—20 „	2	1	3
20—25 „	7	5	12
25—35 „	10	11	21
35—45 „	28	15	43
45—55 „	28	11	39
55—65 „	23	13	36
65—75 „	18	21	39
75—85 „	9	14	23
85 and over	3	4	7
Totals	191	160	351

3.—TABLE SHOWING CHIEF STATISTICS OF DEATHS OF ALL
RACES IN THE BOROUGH DURING THE PAST FIVE YEARS.

Race.	1911-12	1912-13	1913-14	1914-15	1915-16
European ...	362	311	314	328	351
Native ...	110	129	123	127	145
Asiatic ...	296	235	189	177	180
Totals ...	768	675	626	632	676
Rate per 1,000					
European ...	9.9	8.7	8.6	8.8	8.9
Native ...	6.0	6.4	5.9	6.2	7.0
Asiatic ...	16.9	13.0	10.3	9.4	9.3

4.—TABLE FOR COMPARISON SHOWING RECORDED DEATH RATES
PER 1,000 IN ENGLAND AND WALES IN 1915.

England and Wales	15.1
96 Great Towns, including London	15.6
145 Smaller Towns	14.0
England and Wales, less the 241 Towns	14.8
London	16.1

5.—TABLE SHOWING MONTHLY DISTRIBUTION OF DEATHS
AMONGST RESIDENTS (EUROPEANS), 1915-16.

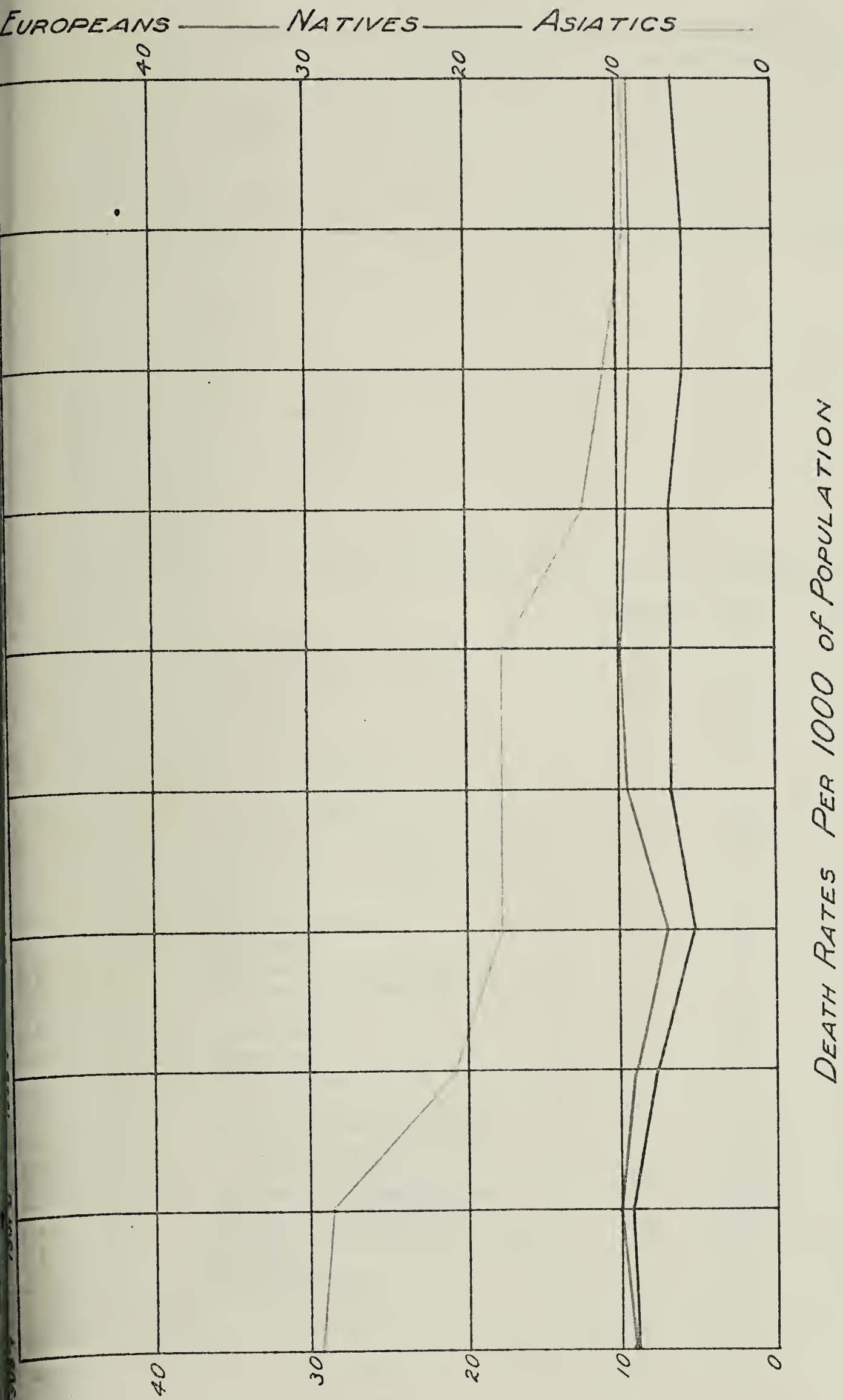
MONTHS.	MALES.	FEMALES.	TOTAL.
1915.			
August	12	9	21
September	22	9	31
October	20	10	30
November	15	19	34
December	23	22	45
1916.			
January	17	17	34
February	12	14	26
March	10	12	22
April	14	5	19
May	13	18	31
June	16	12	28
July	17	13	30
Totals	191	160	351

6.—TABLE OF DEATHS IN INSTITUTIONS OR NURSING HOMES, Etc.

	EUROPEAN.		NATIVE.		ASIATIC.		TOTAL.	
	M.	F.	M.	F.	M.	F.	M.	F.
Addington Hospital	54	20	21	7	15	7	90	34
Durban Gaol ... ..	...	...	4	...	...	...	4	...
Point Convict Station	...	...	3	...	1	...	4	...
Sanatorium, Chelmsford Road	5	4	...	...	...	...	5	4
Indian Immigration Depot Hospital ... ..	...	...	...	...	1	2	1	2
Private Hospitals	3	1	...	...	...	...	3	1
S.A.R. Hospital ... ..	...	...	8	...	7	1	15	1
Corporation Hospital	3	1	...	...	...	...	3	1
Native Womens Hostel	...	...	...	1	...	...	...	1
Totals	65	26	36	8	24	10	125	44

CHART 1.

Chart showing Death Rate of the different Races during the past ten years:—



7.—TABLE OF NON-RESIDENT DEATHS IN DURBAN NOT
INCLUDED IN TABLE 3.

1915.						1916.								Total
		Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	
European	...	11	11	10	6	9	8	10	11	4	4	14	6	104
Native	...	5	2	6	11	7	8	5	5	6	5	4	4	68
Asiatic	...	8	3	7	5	2	4	5	3	5	4	8	10	64
Totals	...	24	16	23	22	18	20	20	19	15	13	26	20	231

8.—TABLE SHOWING CAUSES OF NON-RESIDENT DEATHS.

	European	Native	Asiatic	Total
Dysentery	2	4	5	11
Enteric Fever	3	—	—	3
Diphtheria	1	—	—	1
Tetanus	—	1	—	1
Malaria	1	—	1	2
Venereal Diseases	1	—	1	2
Puerperal Fever	—	1	—	1
Septic Diseases	3	3	—	6
Phthisis	16	10	8	34
Other Forms of Tuberculosis	3	6	3	12
Influenza	1	—	—	1
Cancer	8	1	1	10
Diseases of Birth and Development	1	1	—	2
Old Age	5	0	7	12
Diseases of Nervous System	3	1	5	9
Diseases of Heart and Circulatory System	21	7	10	38
Pneumonia	3	12	4	19
Bronchitis	—	—	1	1
Other Diseases of Respiratory System	5	—	0	5
Diarrhœa, Catarrh, Enteritis	3	7	2	12
Other Diseases of Liver and Alimentary Tract	2	6	3	11
Diseases of Urinary System	11	2	6	19
Diseases of Child Birth	1	1	—	2
Diseases of Reproductive System	1	—	—	1
Accidents	3	3	2	8
All other Causes	6	2	5	13
Totals	104	68	64	236

CHART 2.

Table of Columns showing the European Monthly Deaths for past five years:—

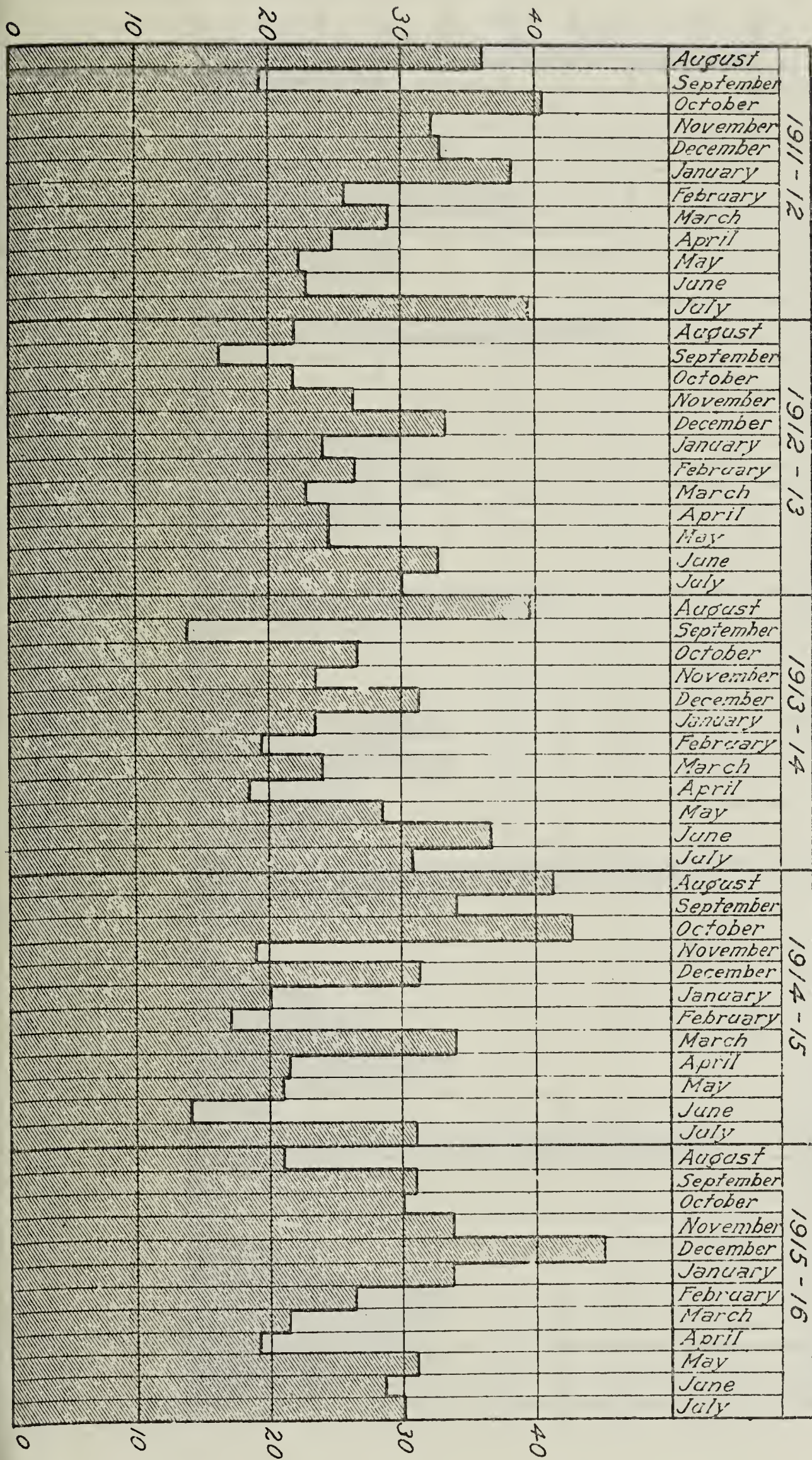
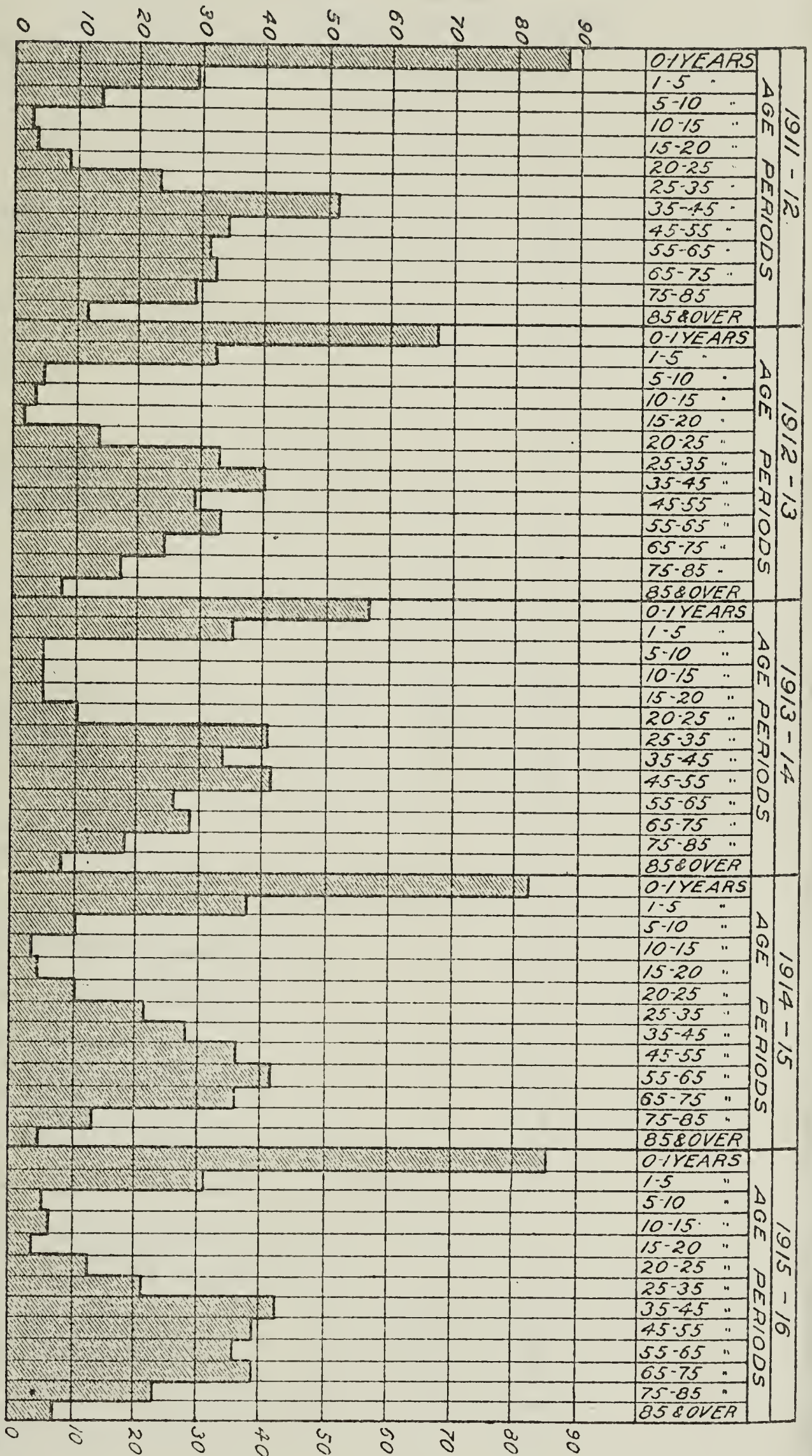


CHART 3.

Table of Columns showing the European Total Deaths occurring at various ages during the past five years:—



CLASSIFICATION OF DEATHS.

Deaths classified according to the International Classification of Causes of Sickness and Death:—

		Europeans.		
		1913-14.	1914-15.	1915-16.
1.	Typhoid Fever	16	4	8
2.	Typhus Fever	—	—	—
3.	Relapsing Fever	—	—	—
4.	Malaria	—	2	—
5.	Small-pox	—	—	—
6.	Measles	2	—	3
7.	Scarlet Fever	—	—	—
8.	Whooping Cough	3	3	2
9.	Diphtheria and Croup	6	6	4
10.	Influenza	—	1	3
11.	Biliary Fever	—	—	—
12.	Asiatic Cholera	—	—	—
13.	Cholera Nostras	—	—	—
14.	Dysentery	2	6	6
15.	Plague	—	—	—
16.	Yellow Fever	—	—	—
17.	Leprosy	—	—	—
18.	Erysipelas	—	—	1
19.	Other Epidemic Diseases	—	—	—
20.	Purulent Infection and Septicæmia ...	2	—	—
21.	Glanders	—	—	—
22.	Anthrax	—	—	1
23.	Rabies	—	—	—
24.	Tetanus	1	1	—
25.	Mycoses	—	—	—
26.	Pellagra	—	—	—
27.	Beri-beri	—	—	—
28.	Tuberculosis of the Lungs	20	13	20
29.	Acute Miliary Tuberculosis	1	2	—
30.	Tuberculous Meningitis	—	1	3
31.	Abdominal Tuberculosis	1	—	1
32.	Pott's Disease	—	—	1
33.	White Swelling	—	—	—
34.	Tuberculosis of other Organs	—	—	—
35.	Disseminated Tuberculosis	—	—	—
36.	Rickets	—	—	—
37.	Syphilis	3	2	1
38.	Gonococcus Infection	—	—	—
39.	Cancer and other Malignant Tumours of Buccal Cavity	6	3	6
40.	Cancer and other Malignant Tumours of Stomach and Liver	5	4	5
41.	Cancer and other Malignant Tumours of Peritoneum, Intestines, Rectum	3	7	4
42.	Cancer and other Malignant Tumours of Female Genital Organs	4	5	3
43.	Cancer and other Malignant Tumours of Breast	4	2	2
44.	Cancer and other Malignant Tumours of Skin	—	—	—
45.	Cancer and other Malignant Tumours of other Organs not specified	1	4	4
46.	Other Tumours (Tumours of Female Genital Organs excepted)	1	1	—
47.	Acute Articular Rheumatism	1	2	2
48.	Chronic Rheumatism and Gout	—	1	1
49.	Scurvy	—	1	—
50.	Diabetes	6	1	9
51.	Exophthalmic Goitre	3	—	—
52.	Addison's Disease	—	—	1

		Europeans.		
		1913-14.	1914-15.	1915-16.
53.	Leucæmia	—	—	1
54.	Anæmia, Chlorosis	1	2	1
55.	Other General Diseases	3	7	2
56.	Alcoholism (Acute or Chronic)	2	—	1
57.	Chronic Lead Poisoning	—	—	—
58.	Other Chronic Occupation Poisonings	—	—	—
59.	Other Chronic Poisonings	—	—	—
60.	Encephalitis	1	1	—
61.	Simple Meningitis	8	6	3
61a.	(Including Cerebrospinal Fever)	—	—	—
62.	Locomotor Ataxia	2	1	1
63.	Other Diseases of Spinal Cord	2	1	2
64.	Cerebral Hæmorrhage, Apoplexy	10	10	15
65.	Softening of Brain	—	1	4
66.	Paralysis without specified cause	1	3	1
67.	General Paralysis of Insane	—	—	—
68.	Other Forms Mental Alienation	—	—	—
69.	Epilepsy	—	—	1
70.	Convulsions (Non-Puerperal)	—	—	—
71.	Convulsions of Infants	1	4	7
72.	Chorea	—	—	—
73.	Neuralgia and Neuritis	—	—	—
74.	Other Diseases of Nervous System	—	2	—
75.	Diseases of Eyes and their Annexa	—	—	—
76.	Diseases of the Ears	—	1	—
77.	Pericarditis	—	—	—
78.	Acute Endocarditis	1	2	1
79.	Organic Diseases of Heart	19	19	45
80.	Angina Pectoris	—	1	—
81.	Diseases of Arteries, Atheroma, Aneurysm	5	3	2
82.	Embolism and Thrombosis	—	1	—
83.	Diseases of Veins (Varices, Hæmorrhoids, Phlebitis, etc.	—	—	—
84.	Diseases of Lymphatic System (Lymphangitis, etc.)	—	—	—
85.	Hæmorrhage: Other Diseases of Circulatory System	—	—	—
86.	Diseases of Nasal Fossæ	—	—	—
87.	Diseases of Larynx	1	1	—
88.	Diseases of Thyroid Body	—	1	1
89.	Acute Bronchitis	2	3	3
90.	Chronic Bronchitis	3	3	7
91.	Broncho-Pneumonia	7	6	4
92.	Pneumonia	6	12	6
93.	Pleurisy	2	—	2
94.	Pulmonary Congestion, Pulmonary Apoplexy	—	—	1
95.	Gangrene of the Lung	—	—	—
96.	Asthma	—	—	2
97.	Pulmonary Emphysema	—	—	—
98.	Other Diseases of Respiratory System (Tuberculosis excepted)	—	2	1
99.	Diseases of Mouth and Annexa	—	—	1
100.	Diseases of Pharynx	—	—	—
101.	Diseases of Oesophagus	—	—	1
102.	Ulcer of the Stomach	3	—	2
103.	Other Diseases of Stomach (Cancer excepted)	5	1	5
104.	Diarrhœa and Enteritis (under 2 years)	29	43	32
105.	Diarrhœa and Enteritis (over 2 years)	9	12	10
106.	Ankylostomiasis	—	—	—
107.	Intestinal Parasites	1	—	—
108.	Appendicitis and Typhlitis	—	4	3

		Europeans.		
		1913-14.	1914-15.	1915-16.
109.	Hernias, Intestinal Obstructions	2	2	3
110.	Diseases of the Intestines	—	2	—
111.	Acute Yellow Atrophy of the Liver ...	—	—	—
112.	Hydatid Tumour of Liver	—	—	1
113.	Cirrhosis of Liver	3	1	3
114.	Biliary Calculi	2	1	—
115.	Other Diseases of Liver	1	—	1
116.	Diseases of Spleen	—	—	—
117.	Simple Peritonitis (Non-Puerperal) ...	—	2	1
118.	Other Diseases of Digestive System (Cancer and Tuberculosis excepted) ...	—	—	2
118a.	Abscess of Liver	2	3	1
119.	Acute Nephritis	—	1	—
120.	Bright's Disease	14	11	9
121.	Chyluria	—	—	—
122.	Other Diseases of Kidneys and Annexa	1	1	—
123.	Calculi of Urinary Passages	—	2	—
124.	Diseases of Bladder	1	—	1
125.	Diseases of the Urethra, Urinary Abscess	—	1	—
126.	Diseases of Prostate	1	—	1
127.	Non-Venereal Diseases of Male Genital Organs	—	—	—
128.	Uterine Hæmorrhage (Non-Puerperal) ...	—	—	—
129.	Uterine Tumour (Non-Cancerous)	2	—	—
130.	Other Diseases of Uterus	—	—	1
131.	Cysts and other Tumours of Ovary	1	—	—
132.	Salpingitis and other Diseases of Female Genital Organs	2	—	—
133.	Non-Puerperal Diseases of Breast (Can- cer excepted)	—	—	—
134.	Accidents of Pregnancy	1	—	1
135.	Puerperal Hæmorrhage	—	—	—
136.	Other Accidents of Labour	1	—	1
137.	Puerperal Septicæmia	—	1	2
138.	Puerperal Albuminuria and Convulsions	2	1	—
139.	Puerperal Phlegamsia, Alba Dolens, Embolus, Sudden Death	—	—	—
140.	Following Child-Birth (not otherwise defined)	—	—	—
141.	Puerperal Diseases of Breast	—	—	—
142.	Gangrene	1	—	—
143.	Furuncle	1	1	—
144.	Acute Abscess	—	1	—
145.	Other Diseases of Skin and Annexa ...	1	1	—
146.	Diseases of Bones (Tuberculosis ex- cepted)	—	1	—
147.	Diseases of the Joints (Tuberculosis and Rheumatism excepted)	—	—	—
148.	Amputations	—	—	—
149.	Other Diseases of Organs of Locomotion	—	—	—
150.	Congenital Malformations (Still-Births not included)	1	3	6
151.	Congenital Debility, Icterus and Sclerema	20	22	19
152.	Other Diseases peculiar to Early Infancy	1	2	1
153.	Lack of Care	—	—	—
154.	Senility	11	14	9
155.	Suicide by Poison	2	1	—
156.	Suicide by Asphyxia	—	—	—
157.	Suicide by Hanging or Strangulation ...	—	1	—
158.	Suicide by Drowning	—	—	—
159.	Suicide by Firearms	4	2	—
160.	Suicide by Cutting or Piercing Instru- ments	—	1	1

		Europeans.		
		1913-14.	1914-15.	1915-16.
161.	Suicide by Jumping from High Places	—	—	—
162.	Suicide by Crushing	—	—	—
163.	Other Suicides	—	1	—
164.	Poisoning by Food	—	—	—
165.	Other Acute Poisonings	2	4	—
166.	Conflagration	—	1	—
167.	Burns (Conflagration excepted)	4	—	2
168.	Absorption of Deleterious Gases (Con- flagration excepted)	2	—	—
169.	Accidental Drowning	1	2	2
170.	Traumatism by Firearms	—	1	—
171.	Traumatism by Cutting or Piercing In- struments	—	—	—
172.	Traumatism by Fall	1	—	2
173.	Traumatism in Mines or Quarries	—	—	—
174.	Traumatism by Machines	—	1	—
175.	Traumatism by other Crushing (Vehicles, Railways, Landslides, etc.)	3	5	2
176.	Injuries by Animals	—	—	—
177.	Starvation	—	—	—
178.	Excessive Cold	—	—	—
179.	Effects of Heat	—	—	—
180.	Lightning	—	1	—
181.	Electricity (Lightning excepted)... ..	—	—	—
182.	Homicide by Firearms	—	—	—
183.	Homicide by Cutting or Piercing In- struments	—	—	—
184.	Homicide by other means	—	—	—
185.	Fractures (cause not specified)	1	—	2
186.	Other External Violence	—	—	—
187.	Ill-defined Organic Disease	—	—	—
188.	Sudden Death	1	—	—
189.	Cause of Death not specified or ill-defined	5	7	18
		—	—	—
Totals		314	328	351
		—	—	—

EUROPEAN DEATHS—ARRANGED ACCORDING TO
MONTHS AND CERTAIN DISEASES

Diseases.			August.	September.	October.	November.	December.	January.	February.	March.	April.	May.	June.	July.	Total 1915-16	Total 1914-15.
1. Plague	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Smallpox	..	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Dysentery	...	...	0	0	0	3	2	0	0	0	0	1	0	0	6	6
4. Enteric Fever	...	...	0	0	0	0	2	2	1	2	0	1	0	0	8	4
5. Diphtheria	...	...	0	0	1	0	0	1	1	0	0	0	1	0	4	6
6. Scarlet Fever	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7. Measles	...	...	0	0	0	0	0	0	0	0	0	0	0	3	3	0
8. Whooping Cough	...	...	0	1	0	0	0	0	0	0	0	0	0	1	2	3
9. Tetanus	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	1
0. Malaria	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	2
1. Venereal Diseases	...	..	0	0	0	0	0	0	1	0	0	0	0	0	1	2
2. Puerperal Fever	...	..	0	0	0	0	0	0	0	1	0	0	0	0	1	1
3. Septic Diseases	...	..	0	0	0	0	0	0	1	0	0	0	0	0	1	2
4. Phthisis	...	...	0	4	0	2	4	1	1	1	2	0	1	4	20	13
5. Other Forms of Tuberculosis	...	...	0	0	1	1	0	0	0	0	2	0	1	0	5	3
6. Other Infectious Diseases	...	...	0	1	0	0	0	0	0	0	0	0	0	0	1	0
7. Influenza	...	...	1	0	0	0	0	0	0	0	0	0	0	2	3	1
8. Cancer	...	..	2	2	1	1	3	2	2	1	3	3	3	1	24	25
9. Diseases of Birth and Development	...	...	1	1	4	0	2	0	3	2	3	6	3	1	26	27
0. Old Age	...	...	0	0	1	2	3	1	0	0	0	1	0	1	9	14
1. Diseases of Nervous System	...	...	6	5	4	2	0	7	2	1	0	5	2	0	34	27
2. Diseases of Heart and Circulatory System	...	...	3	4	3	7	5	6	2	4	1	0	6	7	48	26
3. Pneumonia	...	...	0	0	0	0	0	0	5	0	2	1	1	2	11	18
4. Bronchitis	...	...	2	1	1	0	1	0	0	3	0	1	0	1	10	6
5. Other Diseases Respiratory System	...	...	1	0	0	0	0	1	1	0	0	2	0	1	6	4
6. Diarrhœa, Catarrh, Enteritis	...	...	1	4	5	8	10	8	1	0	1	2	2	0	42	55
7. Other Diseases of Liver and Alimentary Track	...	...	1	2	3	2	2	2	1	2	1	3	2	3	24	16
8. Diseases of Urinary System	...	...	0	2	3	0	2	1	0	0	0	1	2	0	11	16
9. Diseases of Child-Birth	...	...	0	0	0	0	0	0	0	2	0	1	0	0	3	1
0. Diseases of Reproductive System	...	...	0	0	0	0	1	0	0	0	0	0	0	0	1	0
1. Accidents	...	...	1	1	1	0	2	1	0	0	1	1	1	1	10	15
2. Homicide	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Suicide	...	...	1	0	0	0	0	0	0	0	0	0	0	0	1	6
4. Execution	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5. All other Causes	...	...	1	3	2	6	6	1	4	3	3	2	3	2	36	28
TOTALS	...	...	21	31	30	34	45	34	26	22	19	31	28	30	351	328

NATIVE DEATHS ARRANGED ACCORDING TO MONTHS AND CERTAIN DISEASES.

Diseases.				August	September	October	November	December	January	February	March	April	May	June	July	Total 1915-16	Total 1914-15
1.	Plague	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.	Smallpox	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.	Dysentery	...	...	0	2	1	3	2	1	0	0	0	0	1	1	11	9
4.	Enteric Fever	...	...	0	0	0	0	0	0	1	1	0	0	0	0	2	7
5.	Diphtheria	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6.	Scarlet Fever	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.	Measles	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.	Whooping Cough	...	...	0	0	0	0	0	2	0	0	0	0	0	0	2	2
9.	Tetanus	...	...	1	1	0	1	0	2	0	0	0	0	0	1	6	1
10.	Malaria	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
11.	Venereal Diseases	...	...	0	0	0	0	0	0	0	1	0	0	0	0	1	2
12.	Puerperal Fever	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
13.	Septic Diseases	...	...	0	0	2	1	0	0	1	0	0	0	1	0	5	3
14.	Phthisis	...	...	1	2	2	0	0	1	0	0	1	0	1	0	8	9
15.	Other forms of Tuberculosis	...	...	0	0	0	1	1	1	0	1	0	0	0	0	4	4
16.	Other Infectious Diseases	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17.	Influenza	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18.	Cancer	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	1
19.	Diseases of Birth and Development	...	...	1	1	1	1	3	2	0	0	1	0	0	2	12	8
20.	Old Age	...	...	0	1	0	0	0	0	0	0	0	0	0	0	1	0
21.	Diseases of Nervous System	...	...	1	1	1	0	3	0	0	0	0	0	0	1	7	2
22.	Dis. of Heart & Circulatory System	...	...	0	1	1	2	1	0	1	2	0	1	0	1	10	6
23.	Pneumonia	...	...	2	1	4	1	1	3	1	1	0	2	3	1	20	19
24.	Bronchitis	...	...	0	1	0	0	1	1	1	0	0	0	0	1	5	5
25.	Other Dis. of Respiratory System	...	...	0	0	0	0	0	0	1	0	0	0	0	0	1	3
26.	Diarrhœa, Catarrh, Enteritis	...	...	1	1	0	4	8	3	2	1	0	0	0	1	21	15
27.	Other Dis. of Liver and Alimentary Track	...	...	0	0	0	0	0	0	1	0	1	1	0	0	3	4
28.	Diseases of Urinary System	...	...	1	1	0	0	1	0	0	0	0	0	1	0	4	6
29.	Diseases of Child Birth	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	1
30.	Diseases of Reproductive System...	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.	Accident	...	...	1	1	2	1	1	1	2	3	3	0	1	0	16	14
32.	Homicide	...	...	0	0	0	0	0	0	0	0	0	2	0	0	2	1
33.	Suicide	...	...	0	0	0	0	0	0	1	0	0	0	0	0	1	0
34.	Execution	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.	All Other Causes	...	...	1	0	1	0	0	0	0	0	0	0	1	0	3	5
Totals				10	14	15	15	22	17	12	10	6	6	9	9	145	127

ASIATIC DEATHS ARRANGED ACCORDING TO MONTHS
AND CERTAIN DISEASES.

Diseases.				August	September	October	November	December	January	February	March	April	May	June	July	Total, 1915-16.	Total, 1914-15.
1.	Plague	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2.	Smallpox	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3.	Dysentery	...	...	0	1	1	0	1	1	1	0	0	0	1	0	6	1
4.	Enteric Fever	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5.	Diphtheria	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	2
6.	Scarlet Fever	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7.	Measles	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8.	Whooping Cough...	...	...	0	0	0	0	0	0	0	0	0	0	1	0	1	0
9.	Tetanus	...	...	0	0	0	0	0	0	0	2	0	0	0	1	3	1
10.	Malaria	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	1
11.	Venereal Disease	...	...	0	0	0	0	1	0	0	0	0	0	0	0	1	5
12.	Puerperal Fever	...	...	0	0	0	0	0	0	0	0	0	1	0	0	1	3
13.	Septic Diseases	...	...	0	0	0	0	0	0	0	1	2	0	1	1	5	5
14.	Phthisis	...	...	0	2	2	1	1	2	1	1	1	0	1	1	13	15
15.	Other forms of Tuberculosis	...	...	0	1	1	1	0	0	1	1	0	2	1	1	9	8
16.	Other Infectious Diseases	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17.	Influenza	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	1
18.	Cancer	...	...	0	1	0	0	0	0	0	0	0	0	0	0	1	4
19.	Diseases of Birth and Develop- ment	...	...	1	2	2	0	2	1	0	2	2	2	0	6	14	14
20.	Old Age	...	...	0	0	0	0	0	1	0	1	0	0	1	0	3	3
21.	Diseases of Nervous System	...	...	0	2	1	1	1	0	0	0	0	0	2	0	7	10
22.	Dis. of Heart and Circulatory System	...	...	1	3	0	0	0	1	1	1	0	4	2	0	13	11
23.	Pneumonia	...	...	4	0	0	1	2	0	3	2	1	6	2	5	26	25
24.	Bronchitis	...	...	2	0	0	0	0	0	0	0	3	0	1	1	7	13
25.	Other Dis. of Respiratory System	...	...	0	0	0	0	0	0	0	0	0	1	0	0	1	3
26.	Diarrhœa, Catarrh, Enteritis...	...	...	0	4	2	2	4	4	0	2	0	0	2	3	23	22
27.	Other Diseases of Liver and Alimentary Track	...	...	0	2	0	0	1	2	1	0	1	2	1	0	10	9
28.	Diseases of Urinary System	...	...	1	0	0	0	0	1	1	1	0	0	1	0	5	9
29.	Diseases of Child-Birth	...	...	1	0	1	0	1	0	0	0	1	0	1	0	5	1
30.	Dis. of Reproductive System	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31.	Accidents	...	...	0	1	4	0	1	1	1	2	2	2	2	0	16	9
32.	Homicide	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	1
33.	Suicide	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
34.	Execution	...	...	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35.	All other Causes	...	...	1	3	1	0	0	0	1	1	1	0	2	0	10	3
Totals				11	22	15	6	15	14	11	17	14	20	22	13	180	177

INFANTILE MORTALITY.

	Male.	Female.	Total.
Infantile Deaths during 1915-16	40	45	85
Registered Births	457	464	921
Infantile Deaths	40	45	85

This equals 92.3 infantile deaths per 1,000 births and represents the "Infantile Mortality Figure" for Durban, 1915-16.

The following table shows the Infantile Mortality Figure for England and Wales during 1915:—

All England and Wales	110
96 Great Towns, including London	117
145 Smaller Towns	114
England and Wales, less the 241 Towns	98
LONDON	112

TABLE I.—INFANTILE DEATHS GROUPED ACCORDING TO AGES
IN WEEKS AND MONTHS.

Weeks and Months	Under 1 Week	1-2 Weeks	2-3 Weeks	3-4 Weeks	Total under 1 month	1-2 Months	2-3 Months	3-4 Months	4-5 Months	5-6 Months	6-7 Months	7-8 Months	8-9 Months	9-10 Months	10-11 Months	11-12 Months	Total under 1 year
Deaths	15	9	5	0	29	9	5	8	4	3	8	3	4	4	2	6	85
Previous Year	16	8	0	7	31	5	7	3	4	3	7	3	7	8	1	3	82

TABLE 2.—INFANTILE DEATHS GROUPED ACCORDING TO
MONTHLY INCIDENCES.

	1915						1916						Total
Months	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April	May	June	July	
Deaths	1	10	9	7	13	8	10	4	5	9	7	2	85
Previous Year	15	11	11	4	11	4	3	7	4	4	3	5	82

TABLE 3. MONTHLY DISTRIBUTION OF SOME OF THE MORE
COMMON CAUSES OF INFANT DEATHS.

	1915						1916						Total.
Months	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	April.	May.	June	July	
Premature Birth	0	0	2	0	1	0	3	1	1	1	1	0	10
Congenital Debility	0	1	1	0	0	0	0	0	0	4	1	0	7
Enteritis	0	3	3	5	9	2	1	0	1	0	0	0	24
Gastric Catarrh	0	0	0	0	0	1	1	1	0	0	1	0	4
Marasmus	1	1	1	2	2	1	1	0	0	0	1	0	10

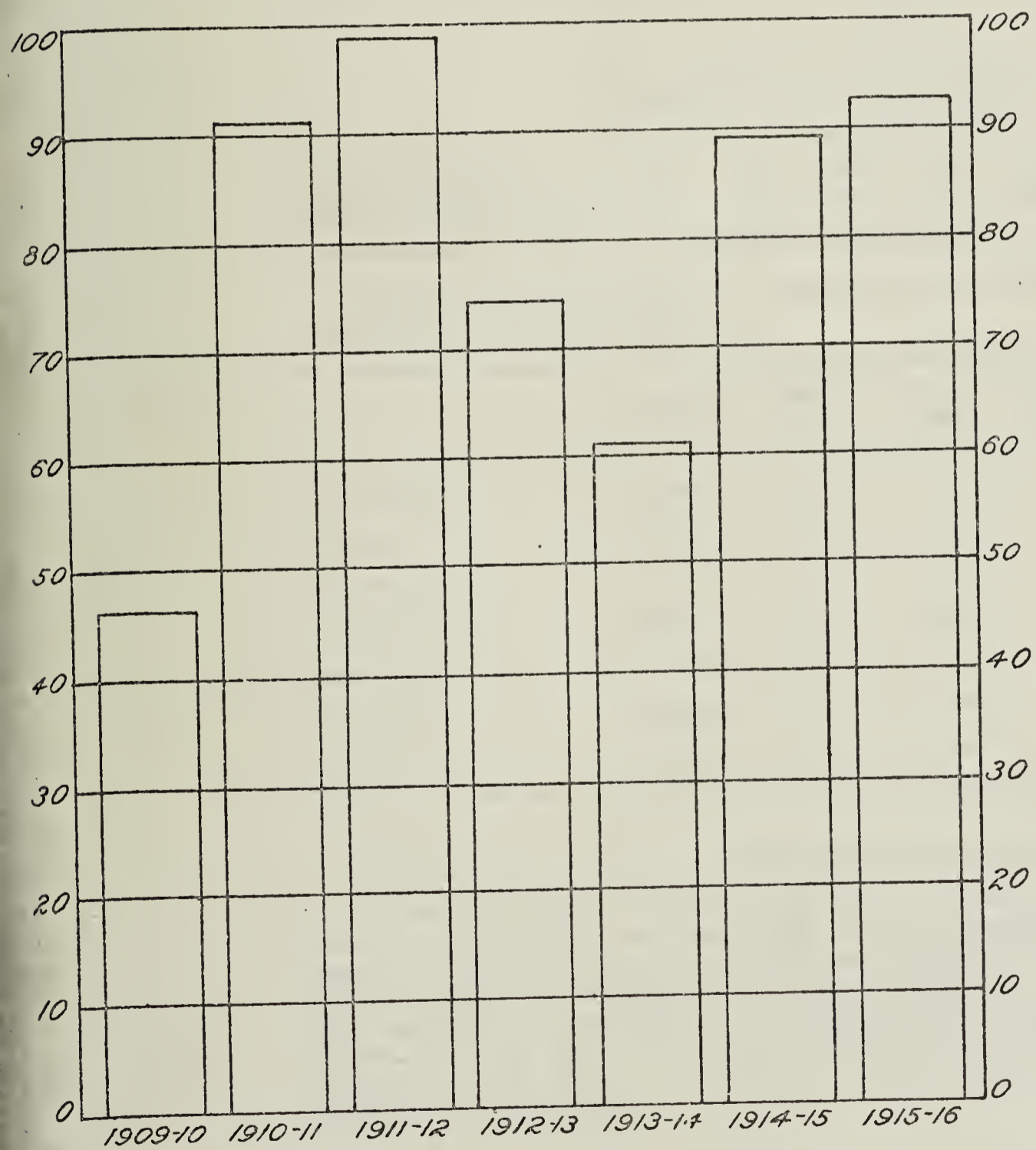
TABLE 4.—SHOWING INFANTILE DEATHS IN WARDS FOR THE
PAST FIVE YEARS.

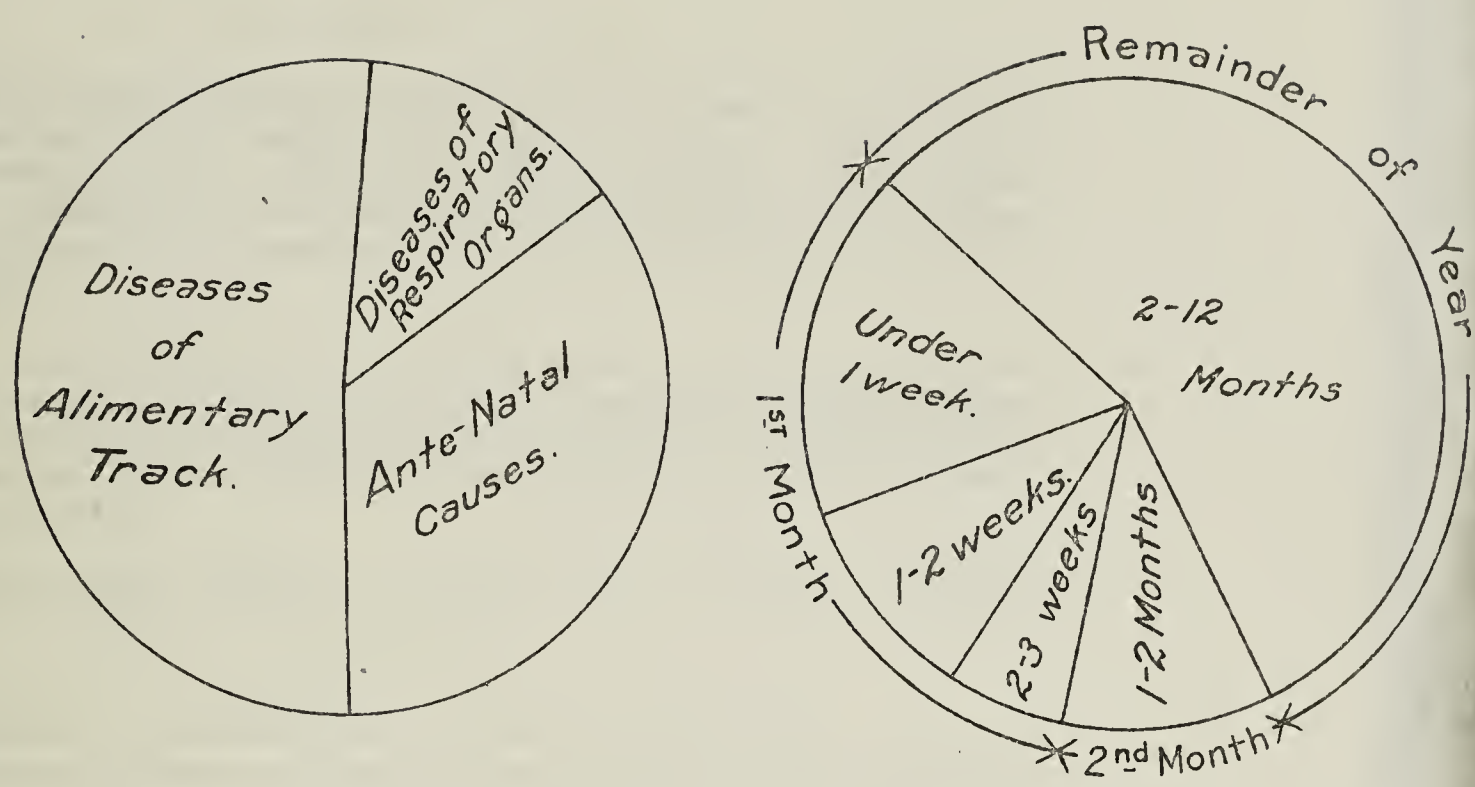
YEARS.	WARDS.							TOTAL.
	1	2	3	4	5	6	7	
1911-12	13	8	14	12	10	11	19	87
1912-13	6	5	8	16	10	10	13	68
1913-14	5	8	8	11	7	9	8	56
1914-15	13	7	10	17	12	11	12	82
1915-16	5	8	19	18	10	10	15	85

INFANTILE MORTALITY.

CHART.

The following columns and table exhibit the Infantile Mortality Figure for the past seven years:—





The above diagrams show the proportion of infant deaths due to certain causes, also the proportion of deaths at various ages up to the first twelve months of life.

	YEAR.						
	1909-10	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16
No. of Infant Deaths ...	41	86	87	68	56	82	85
Infantile Mortality Figure	45.4	90.3	98.5	74.8	60.9	89.4	92.3

The following table shows the comparative rates (Europeans) from the principal towns of South Africa :—

	Population	Birth Rate.	Death Rate.	Infantile Mortality.	Phthisis Death Rate.
Johannesburg ...	134,000	31.02	9.98	79.62	.5
Pretoria ...	30,000	25.5	7.8	91.3	.366
Bloemfontein ...	13,500	29.9	5.92	62.02	.022
Capetown, City ...	86,370	26.37	10.82	79.45	.99
East London ...	13,566	28.7	10.3	61.5	.58
Maritzburg ..	15,000	34.3	9.66	62.2	...
Durban ...	39,500	23.3	8.9	92.3	.51

REVIEW OF INFANTILE MORTALITY IN DURBAN, 1905-1916.

Of the total deaths (351) occurring in the Borough last year, 85 were those of children under one year of age, and when stated in relation to the number of births (921) registered during the same period, after making allowance for country or non-resident births and deaths, the Infantile Mortality Rate was 92.3 per 1,000 births, as compared with 89.4 for the previous year, and 80.8 for the last eleven years. This Infantile Mortality Figure is regarded by sanitarians as an important index of the hygienic and social conditions of a population.

An increased amount of interest in Durban has been taken in connection with the subject of infantile mortality during the past year. Towards the end of this municipal year, a "Child Life Protection Society" was inaugurated under the presidency of Her Excellency Lady Buxton, and this was followed by the Town Council resolving to appoint a Lady Sanitary Inspector for the year 1916-17.

Advantage might therefore be taken in this report to deal somewhat more fully with the question of Infantile Mortality as it has affected Durban during the past eleven years, so that the members of the Child Life Protection Society might have some facts, figures and hopes placed before them at the commencement of their activities.

The following table exhibits the certified causes of deaths occurring amongst infants in Durban during 1905-1916:—

TABLE 1.—CERTIFIED CAUSES OF DEATHS.

	1905/06	1906/07	1907/08	1908/09	1909/10	1910/11	1911/12	1912/13	1913/14	1914/15	1915/16
Malaria ...	19	2	1	0	1	0	0	0	0	0	0
Smallpox ...	0	0	0	0	0	0	0	0	0	0	0
Measles ...	1	0	0	3	0	0	3	2	1	0	0
Whooping Cough...	0	2	2	2	0	1	1	1	2	1	2
Diphtheria ...	0	0	0	0	1	0	1	0	0	0	0
Dysentery...	1	0	2	2	1	1	0	0	0	0	1
Erysipelas ...	0	0	0	0	1	1	0	0	0	0	0
Pyæmia ...	0	0	0	0	1	0	0	0	0	0	0
Blood Poisoning ...	0	0	1	0	0	0	0	0	0	0	0
Tetanus ...	1	0	0	3	0	2	1	0	0	0	0
" Neonatorum	1	1	0	1	1	0	0	0	0	1	0
General											
Tuberculosis ...	0	0	1	0	0	0	0	0	0	0	0
Tubercular											
Meningitis ...	0	1	0	0	0	1	0	0	0	0	0
Tabes Mesenterica	0	0	0	1	1	0	0	0	0	0	0
Rickets ...	0	0	0	1	0	0	0	0	0	0	0
Syphilis ...	1	0	1	1	0	2	0	0	1	2	1
Scurvy ...	0	1	0	0	0	0	0	0	0	1	0
Haemophilia ...	0	0	0	1	0	0	0	0	0	1	1
Meningitis ...	0	0	1	0	0	0	0	1	0	1	0
Spinal Disease ...	0	0	0	0	0	0	1	0	0	0	0
Epileptoid											
Convulsions ...	0	0	0	0	0	1	0	0	0	0	0
Convulsions ...	2	1	3	0	2	2	2	3	1	2	2
Cretinism ...	0	0	0	0	0	0	0	0	0	1	0
Septic Endocarditis	0	0	0	0	0	0	0	0	0	1	0
Venous Thrombosis	0	0	1	0	0	0	0	0	0	0	0
Oedema of Glottis	0	0	0	0	0	0	0	1	0	0	0
Bronchitis...	1	1	0	0	0	2	2	5	0	3	4
Acute Catarrh of											
Respiratory											
Passages ...	0	0	0	0	0	0	1	0	0	0	0
BronchoPneumonia	2	0	2	4	2	2	6	2	1	2	2
Pneumonia ...	2	0	1	2	3	3	0	1	1	2	3
Lobar Pneumonia	0	0	0	0	0	1	0	0	0	1	0
Double Pneumonia	0	0	0	1	0	0	0	0	0	0	0
Pulmonary											
Congestion ...	0	0	1	0	0	0	0	0	0	0	0
Septic Thrush ...	0	0	0	0	0	0	0	0	0	0	1
Gastric Catarrh ...	6	3	4	0	3	4	9	2	1	1	4
Gastritis ...	0	0	1	1	0	0	0	0	0	0	0
Pyloric Stenosis ...	0	0	0	0	0	0	1	0	0	0	0
Haematemesis ...	0	0	0	0	0	0	0	1	0	0	0
Enteritis ...	12	15	13	5	1	14	16	15	14	21	17

TABLE I. CERTIFIED CAUSES OF DEATHS (Continued).

	1905/06	1906/07	1907/08	1908/09	1909/10	1910/11	1911/12	1912/13	1913/14	1914/15	1915/16
Athrepsia ...	0	1	0	0	0	0	0	0	0	0	0
Muco-Enteritis ...	5	3	2	3	1	2	0	3	0	0	0
Gastro-Enteritis ...	4	5	9	4	6	2	8	5	2	6	0
Infantile Diarrhoea	2	3	4	3	1	3	7	1	1	0	3
Catarrh of Bowels	2	2	6	0	4	0	0	0	0	0	1
Gastro Intestinal Disturbance ...	1	0	0	0	0	0	0	0	0	0	0
Gastro Intestinal Catarrh... ..	0	0	1	3	0	8	6	0	1	3	1
Ileo-Colitis ...	0	0	0	0	0	1	0	1	1	0	0
Chronic Dyspepsia and Diarrhoea ...	0	0	0	0	0	1	0	0	0	0	0
Acute Catarrhal Colitis	0	0	0	0	0	0	0	0	1	0	2
Acute Appendicitis	0	0	0	0	0	0	0	0	0	1	0
Intussusception ...	0	0	1	0	0	1	1	0	0	0	0
Intestinal Obstruction ...	0	0	0	1	0	0	0	0	0	0	1
Peritonitis ...	0	0	0	0	0	0	1	0	0	0	0
Nephritis	0	0	0	0	0	1	0	0	0	0	0
Cystitis	0	0	0	0	0	0	0	0	1	0	0
Circumcision ...	0	0	0	0	0	0	0	0	1	0	0
Boils (Toxaemia)	0	0	0	0	0	0	0	0	0	1	0
Spina Bifida ...	1	0	0	0	0	0	0	0	0	0	0
Imperforate Anus	1	0	0	0	0	0	0	0	0	0	0
Congenital Malfor- mation of Heart	0	0	0	0	1	0	0	0	0	0	0
Congenital Intesti- nal Obstruction	0	0	0	0	0	0	0	0	0	1	0
Congenital Deform- ity of Mouth and Throat	0	0	0	0	0	0	0	0	0	3	0
Imperfect Development ...	0	0	0	0	0	0	1	1	0	0	1
Congenital Malformation ...	0	0	0	0	0	0	0	1	0	0	2
Hydrocephalus ...	0	0	0	0	0	0	0	0	1	0	0
Premature Birth ...	14	16	13	10	4	11	9	11	11	9	9
Congenital Cardiac Weakness	2	0	0	0	0	0	0	0	0	0	2
Debility at Birth...	1	1	0	0	5	1	3	3	1	4	5
Jaundice	0	1	1	1	1	2	0	0	1	1	0
Infantile Weakness	0	0	0	0	0	1	1	0	0	0	3
Inanition	7	3	0	1	1	2	1	0	5	3	3
Marasmus... ..	14	5	13	7	0	3	3	3	6	5	11
Malnutrition ...	2	0	0	0	0	1	0	0	0	0	1
Asthenia	0	0	0	0	0	0	0	1	0	0	0
Atelectasis Pulmon:	0	0	2	0	0	1	0	0	0	2	1
Injury at Birth ...	1	0	1	0	0	5	0	2	0	1	1
Umbilical Haemorrhage ...	0	0	0	0	0	0	0	1	0	0	0
Poisoning (Accidental)	1	0	0	0	0	0	0	0	0	0	0
Burning do. ...	0	0	1	1	0	0	0	0	1	0	0
Fall do.	0	0	0	0	0	0	0	1	0	0	0
Asphyxia do. ...	0	0	0	0	0	1	0	0	0	0	0
Teething	1	0	0	0	0	0	0	0	0	1	1
Hyperpyrexia ...	1	0	0	0	0	0	0	0	0	0	0
Surgical Narcosis...	0	0	0	0	0	1	0	0	0	0	0
Pyrexia	0	0	0	0	0	1	0	0	0	0	0
Totals ...	109	67	89	62	41	86	87	68	56	82	85

A cursory examination of this table shows that *the* serious causes of deaths amongst infants are those related to diarrhoea and other diseases of the digestive system. During the past eleven years, out of a total of 832 infant deaths, 348 have had their source or origin in the alimentary track. Premature births, congenital malformations, injury at birth and conditions generally which precluded the infant having a proper start in life's race numbered during the period mentioned 288 deaths. Diseases of the respiratory passages amounted to 67 deaths and infectious diseases to 88 deaths. The remaining 49 deaths were distributed amongst twenty different certified causes of deaths giving an average of 2.45 deaths per disease.

With these facts before us, it is possible to determine to some extent the direction to pursue in order to combat the infantile mortality as it exists in Durban. So far as the deaths from diseases of the digestive system are concerned, it will be noticed that a very large proportion is certified as due to Enteritis. Now Enteritis means that some substance has obtained entrance into the stomach and intestines of an infant, which has produced such a degree of irritation there, that death has been the result. We have no means of knowing how many more children have suffered from such a condition, but in whom the disease has stopped short of a fatal result.

From careful enquiries made during the years 1906 and 1907, it was found that European babies reared on the breast alone were practically exempt from Enteritis, and other intestinal diseases. It was found that from all causes of infantile deaths those reared by hand died in the proportion of ten to one, as compared with the breast fed infant, and during the year 1906-1907, only one breast reared infant died from Enteritis.

The striking difference between the mortality of breast and hand fed infants in Durban only corroborates what is found in other communities, and carries with it a definite remedial principle, viz., that Health Visitors should emphasise and re-emphasise the necessity for mothers to suckle their infants on every possible occasion. An erroneous impression has developed that the modern woman is less able to breast feed her infant than previous generations; this idea requires to be combatted. Health Visitors have done splendid work on this point in Great Britain. They have, by their advice enormously increased the average number of breast fed infants, with a corresponding decrease in the artificially fed.

When artificial feeding is or has to be resorted to, danger to the life of the infant is continually present, particularly from diarrhoea. Milk being the principal food of an infant, the importance of this being kept in a state of purity will be evident. Contamination of milk is liable to take place at the cow-shed, en route to the consumer, and at the home supplied. No bye-law can be too stringent which aims at the prevention of impurities obtaining access to milk supplies at the place of production and during transportation. The Borough of Durban only recently acquired powers to make standards for this purpose (Ordinance 14 of 1916, Section 11, sub-section 5, para. f). The onus of preventing contamination in the home must rest with the householder, but the Lady Health Visitor must draw suitable attention to the necessity for such being carried out and advise as to the best methods of so doing.

Unfortunately, investigations have shown that want of knowledge regarding infant feeding on the part of the mother has been a potent factor in maintaining a high rate of infantile mortality. Advice tendered by well meaning but equally ignorant individuals has assisted towards this result. It is therefore necessary that facilities be afforded to instruct mothers and expectant mothers in sound principles of child life and infant hygiene. For such work it is essential that the services of a skilled woman be obtained. She must possess (1) tact, (2) be trained in the nursing of infants, and (3) have a knowledge of midwifery and sanitation.

In Great Britain women are now being trained and certificates of competency granted to those who, in the opinion of the examiners, are skilled to carry on this work. In many towns Lady Doctors with this special training are in charge of measures connected with the reduction of Infantile

Mortality. Even Voluntary Health Visitors must be practically acquainted with the daily routine of an infant's life,—its feeding, clothing, sleep and possible ailments, and must also be possessed of great tact.

It will doubtless have struck the thoughtful person that the time to start educating a woman in the conduct of infant life and hygiene is surely not when she is a mother or about to enter motherhood, who will ask "Cannot something be done in this direction for older girls at school or in continuation classes?" In competent hands this can be done, and if *education* is what it pretends to be, viz., to fit a person for her after life work, it ought to be done. Part of every girl's education should be to instil the cardinal principle of breast feeding of infants, to show that cow's milk, however pure, is the secretion intended for that animal's young, the digestive system of which is vastly different from that of the human being, and that the composition of cow's milk—meant for a different order of animal—is quite different from human milk. Instruction might be given as to how to make the best of a bad job by preparing cow's milk to resemble in quality that of the human secretion. Much more could be taught, but a start on infant food would be of prime importance and more useful for 99 per cent. of young women than algebra, etc.

The following interesting table exhibits the ages at which infants have died in Durban during the period 1906-1916:—

TABLE 2.

INFANTILE MORTALITY ---1906-1916.

AGE PERIODS.

Year ended 31st July	Under Weeks.				Under Months.												Total Infants' Deaths	Infantile Mortality Figure	Sex.		Total Births.	
	Under Weeks.				Under Months.														Male	Female	Male	Female
	1	2	3	4	1	2	3	4	5	6	7	8	9	10	11	12						
1906	17	4	4	1	26	13	15	12	14	7	8	6	3	1	2	2	109	100.0	64	45	569	520
1907	15	1	2	3	21	7	1	8	9	2	3	3	5	1	4	3	67	69.2	39	28	481	487
1908	12	6	2	4	24	6	6	9	5	12	9	0	3	7	5	3	89	91.7	52	37	512	459
1909	12	5	3	1	21	3	3	4	7	2	6	5	2	2	4	3	62	67.3	43	19	461	458
1910	10	3	3	0	16	4	2	4	1	4	4	1	1	0	2	2	41	45.4	30	11	457	397
1911	18	6	3	2	29	4	6	3	9	9	4	6	5	4	4	3	86	90.3	49	37	472	480
1912	12	4	3	2	21	6	9	5	4	10	5	5	2	7	7	6	87	98.5	53	34	474	409
1913	16	3	1	2	22	3	3	9	3	2	6	5	6	4	3	2	68	74.8	48	20	464	445
1914	11	4	3	0	18	5	5	5	6	0	3	2	4	2	5	1	56	60.9	34	22	465	454
1915	16	8	0	7	31	5	7	3	4	3	7	3	7	8	1	3	82	89.4	51	31	493	424
1916	15	9	5	0	29	9	5	8	4	3	8	3	4	4	2	6	85	92.3	40	45	457	464
Total ...	154	53	29	22	258	65	62	70	66	54	63	39	42	40	39	34	832	879.8	503	329	5,305	4,997

One point of general interest shown in this table is that over the period 1906-1916, 308 more males than females were born, and that 174 more males than females died, the first year of life tending very largely towards equalization of number of the sexes. Were the sex mortality followed up during the succeeding years, it would be found that the increased mortality among males still continues until in a few years the females predominate, and this is maintained to the end of life.

In the first four columns, the deaths of infants under four weeks of age are shown, and it will be noticed that out of a total of 258 deaths occurring during that period, 154 took place during the first week of infant life.

It will thus be seen that over 30 per cent. of the deaths occur during the first month of life, and that with each succeeding month from the first to the twelfth, the tendency is for the deaths to decrease.

One outstanding fact can be deduced from such figures, and that is that a large number of infants are born unfit to survive. The chief causes of death during this period are premature birth, congenital debility and injury at birth. The proximate causes, that have produced such results, have undoubtedly been acting on the child before its birth. It will, therefore, be seen that in order to satisfactorily take up the matter of infantile mortality, it is not sufficient to deal with the infant after birth only, and that where conditions and circumstances warrant it, agencies must be in operation to give assistance and advice to expectant mothers previous to the birth of the child.

Another point of importance requiring recognition is that of efficient attendance at the mother's confinement, and here let me state that none of the deaths recorded in this table come under the heading of still-births. These have in the past constituted in all communities a considerable number of deaths, many of which might possibly have been prevented with proper and skilled attendance on the mother. Many of these still-births are caused by unnecessarily prolonged labour, owing to the mother being in the hands of unskilled attendants. In order to deal with this phase of the question, legislation is desirable, so that only trained and certified midwives should attend lying-in women. All midwives practising in a community should be under the direct supervision of the Health Department of such a community, and when from poverty, the mother is unable to provide such skilled assistance, the community must provide it.

In Durban we are perhaps content to look upon these infant deaths as being inevitable, from the fact that we are not aware of what is being done in other towns. It might therefore be advisable to finish these notes with a concrete example and see what the town of Bradford in Yorkshire has done to deal with Infantile Mortality. Bradford has adopted a wholly municipal scheme. They have an Ante-natal Clinic and Maternity Home, an Infants' Hospital and Consultation, a Milk Depot, meals for expectant and nursing mothers, a pre-school and a post-school clinic, and a special department for the treatment of diseases of the eye, ear, throat and nose in children. The whole is controlled by the Health Committee of the Corporation, and the Local Government Board contributes half the cost of administering the scheme. The Infants' Department consists of a three storey building—the Clinic is on the first floor, and has waiting, dressing, weighing, and recording rooms, doctor's consultation room, an isolation room, and a dispensary; there are three whole-time lady doctors, a dispenser, and nurses. The mothers are not taught in classes, for it is felt that instruction to be really helpful must be individual and practical. Appliances such as ear syringes are lent; drugs are prescribed if necessary, but the treatment required is found to be very largely dietetic and hygienic. The work is followed up by the Health Visitors who visit the homes. Situated over the Clinic is the Infants' Hospital, containing twenty beds for infants suffering from mal-nutrition. On the ground floor is the milk depot. There are also cooking kitchens where meals for expectant and nursing mothers are prepared. Connected with the Infants' Department is a scheme for training probationer nurses and also student nurses: the latter are trained for three years, practically and theoretically in all the branches of the Department, Clinic, Hospital, and Milk Depot.

Every precaution is taken to prevent abuse when food is given either to mothers or children. All expectant mothers must visit the Ante-natal Clinic for advice; when they become nursing mothers, they must take their infants regularly to the consultations in order that they might be supervised. At the Pre-school Clinic, the medical inspection and treatment previously carried out at the Infants' consultation department is continued until the child passes into the care of the Education Committee; there are two doctors and four fully trained nurses. In addition they have a Post-school Clinic designed to bridge the gulf between school age and insurance age, viz., fourteen to sixteen years. By means of this department it is hoped to form a junction with the medical work in connection with factory employment, street trading, and the like. A special department has been established at the City Hospital for the treatment of eye, ear, nose, and throat diseases occurring during childhood. It consists of a waiting room, consultation room, dispensary, operating theatre, and three wards with twenty beds. This is under the care of a consulting surgeon, a resident doctor and an efficient staff. Ophthalmia neonatorum is treated here in a special ward. The other wards are designed for the treatment of deafness, adenoids, enlarged tonsils, etc. There is a staff of twenty women health visitors, who carry out visitation under the Notification of Births Act.

I append a few tables of Infantile Mortality rates for comparison with Durban's Infantile Mortality rate.

TABLE 3.

INFANTILE MORTALITY RATE FOR DURBAN, 1906-1916.

Year ended 31st July, 1906	...	100.0	per 1,000.
„ „ 1907	...	69.2	„
„ „ 1908	...	91.7	„
„ „ 1909	...	67.3	„
„ „ 1910	...	45.4	„
„ „ 1911	...	90.3	„
„ „ 1912	...	98.5	„
„ „ 1913	...	74.8	„
„ „ 1914	...	60.9	„
„ „ 1915	...	89.4	„
„ „ 1916	...	92.3	„
Rate for 11 years	...	80.8	„

For comparison I append the Infantile Mortality in some large towns in Great Britain in 1913:—

Glasgow	...	129	per 1,000.
Birmingham	...	129	„
Liverpool	...	132	„
Manchester	...	129	„
Nottingham	...	131	„
Portsmouth	...	90	„
Bristol	...	98	„
Edinburgh	...	101	„
Leicester	...	119	„
Bradford	...	127	„
Hull	...	130	„
Newcastle	...	122	„
Sheffield	...	129	„
Stoke	...	169	„
Leeds	...	136	„
Salford	...	143	„
West Ham	...	107	„

The following table shows the Infantile Mortality Figure for *England and Wales during 1914*:—

All England and Wales	105	per 1,000.
97 Great Towns, including London	113	„
145 Smaller Towns	104	„
England and Wales, less the 242 Towns	93	„
LONDON	103	„

Mr. John Burns, President of the Local Government Board, pointed out in 1913, that—

Medical Men's <i>babies</i> died at the rate of	40	per 1,000.
Upper and Middle Classes	77	„
Artisans'	100—130	„
Miners'	160	„
Unskilled Labourers'	150—250	„
Agricultural Labourers'	97	„

The following table shows the comparative Infantile Mortality Rates (Europeans) in the principal towns of *South Africa in the year 1915*:—

Johannesburg	111.38	per 1,000.
Pretoria	94.0	„
Bloemfontein	97.0	„
Cape Town, City	100.46	„
East London	98.4	„
Maritzburg	46.0	„
DURBAN	89.4	„

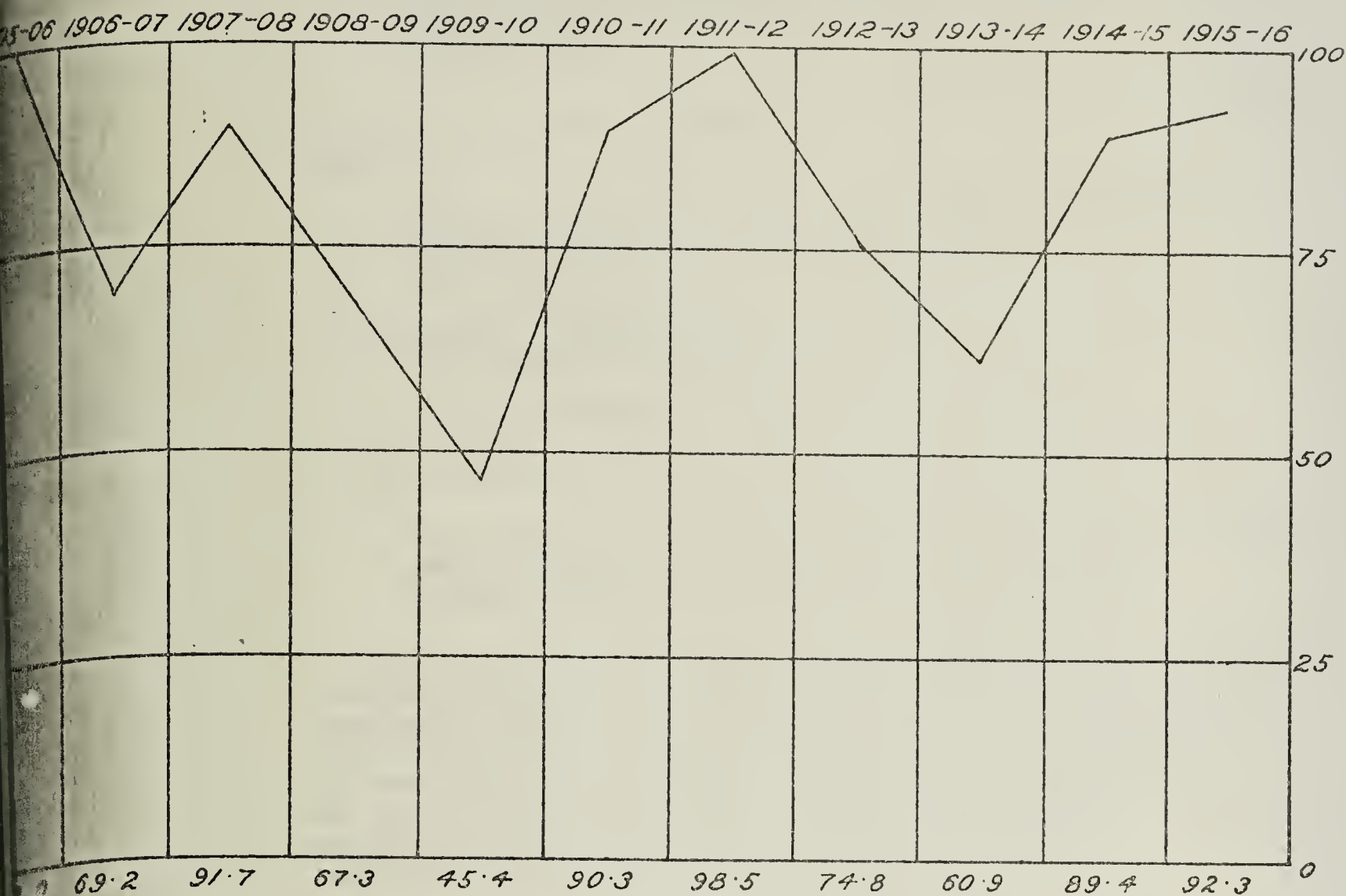
Table showing Infantile Deaths in WARDS in the Borough of Durban for the past seven years:—

Years.	WARDS							Total.
	1	2	3	4	5	6	7	
1909-1910	6	9	5	7	7	4	3	41
1910-1911	12	13	9	16	11	9	16	86
1911-1912	13	8	14	12	10	11	19	87
1912-1913	6	5	8	16	10	10	13	68
1913-1914	5	8	8	11	7	9	8	56
1914-1915	13	7	10	17	12	11	12	82
1915-1916	5	8	19	18	10	10	15	85

The above table does not give any definite information owing to the fact that each Ward comprises large numbers of persons living under different social conditions, and it is the social conditions of life which very largely influence Infantile Mortality.

A spot map showing the distribution of cases of Infantile Mortality in the Borough hangs in my office and may be inspected by those interested in it at any time. A glance at that map will show that infantile deaths chiefly occur in localities inhabited by the lowest wage paid members of this and all other communities. The inability of that class to obtain early and adequate medical services is a factor of much importance and must be provided for in any scheme dealing with this subject.

CHART OF INFANTILE MORTALITY RATES FOR THE PAST 11 YEARS.



It has already been stated that none of the figures in these tables refer to still-births, which may be taken to amount to between thirty and forty a year. Abortions and miscarriages are of course not included. It is recognised that for every five births, there will occur an abortion or miscarriage, and that would give for Durban over 180 of these per annum. Many of these need not occur if provision is made to spread information regarding antenatal precautions that should be taken by pregnant women.

The foregoing facts and figures are merely given for purposes of information. An example (Bradford) of one of hundreds of towns carrying out schemes on practically the same lines is here illustrated. The past fifteen years has been the pioneer stage, but enough data has now been collected to enable a general outline of a practical and reasonable scheme to be formulated. The Local Government Board has put forward the following as being the necessary minimum, viz.:—

A.—For the health of expectant and nursing mothers, the scheme states that the Local Authorities should provide:—

- (a) Maternity centres where expectant and nursing mothers may come for medical advice and treatment.
- (b) A system of home visitation of expectant and nursing mothers.
- (c) Such assistance, when confinement takes place at home, as to assure that the mother shall have skilled and prompt attention.
- (d) Hospital accommodation when the woman to be confined suffers from illness or any deformity, or when other conditions exist involving danger to mother or child.

- (e) Hospital accommodation for treatment of complications following the birth of a child.
- (f) Co-operation with the School Board or Secondary Education Committees in the organisation and conducting of schools for mothers or young children.

B. For the health of children under five years of age, the scheme details:—

- (a) Clinics or Consultation Centres (which may be conducted at a Maternity Centre), where the children may be brought for medical advice and treatment.
- (b) Hospital accommodation for sick children when satisfactory treatment is impossible at home.
- (c) Convalescent Homes for children in impaired health.
- (d) Day Nurseries, or Nursery Schools, for children of suitable age.
- (e) Such records as may enable the Local Authority, through its Medical Officer of Health, to furnish any child of school age with a certified health schedule for presentation on admission to school.

The object of the above is to prevent Infantile Mortality; some towns have higher rates than others of infant deaths, but all are capable of considerable reductions. By the adoption of a scheme in Durban, probably in the neighbourhood of thirty infant deaths a year would be saved. For such work, expenditure for service, equipment and accommodation is required, and special experience on the part of those actively engaged. Twenty lives per annum saved to the community and the state would be no mean contribution to the Empire from Durban and could be achieved.

INFECTIOUS DISEASES.

SMALL-POX.

Towards the end of May, 1916, Small-pox was stated in the daily press to have made great strides in the Lichtenburg district, where it had been epidemic for at least two months, 2,000 cases having been reported. Early in June a serious outbreak was discovered in Kingersdorp, where several Europeans had been attacked, and later in the month cases were reported from Potchefstroom, infection being believed to have been brought from Mafeking district.

In June, 1916, a case of Small-pox was discovered within the Borough at the African Boating Company's Barracks in Point Road. The patient, a native, arrived in Durban from Mafeking on the 21st June, 1916, he complained of feeling ill on the journey, and the day before his arrival in Durban, signs of a papular eruption were noticed on him. He went to work on the 22nd June, but was feeling too ill the day following to continue his duties. He was seen by a doctor on the 27th idem, by which time a vesicular eruption had fully developed and was characteristic in distribution. On the 28th idem, the contents of the vesicles were pustular. The date of infection can thus be fairly traced back to the 6th June, 1916, on which date this native was in Mafeking. The patient was taken to hospital on the 27th June, and those who had been in direct contact with him, more particularly his fellow travellers from Mafeking, were removed and segregated for 16 days, while the other occupants of the premises above mentioned, about 800 natives and 400 Indians, were immediately vaccinated or re-vaccinated and the barracks disinfected. Arrangements were made with the employers of these labourers that they were to be kept under strict surveillance for 18 days, and that under no conditions whatever were they to permit them to leave their work or the

premises until after the expiry of that period. The patient had a moderately severe attack, and he recovered and was discharged after eight weeks in hospital. He stated he had never been vaccinated and there were no signs of any previous vaccination on him. The medical profession in Durban were circularised of the occurrence of this case, in order that they might be on the outlook for others when any suspicious case came to their notice.

Up to 31st July no further cases have occurred.

DIPHTHERIA.

Anti-toxic serum is given by this Department to medical men free of charge for the use of necessitous cases. Serum is administered in all cases immediately on admission to the Municipal Infectious Diseases Hospital, the quantity being regulated by two factors, the day of the disease and the extent of the tissue involved. Bacteriological examinations of 735 specimens of swabs were made during the year, of which 524 gave negative results and 211 positive. It is necessary in the case of scholars and teachers affected with Diphtheria to have three successive swabs proved negative by bacteriological examination, before a clearing certificate to resume school attendance can be granted by this Department. Among the patients admitted to the Infectious Diseases Hospital last year, there were five members from one family who were suffering from this disease at or about the same time. The first case had been mild and overlooked until the others were infected and showed more serious signs and symptoms. It is difficult at times to diagnose clinically mild cases of the disease, but bacterioscopic examination is both speedy and conclusive as to such cases being either positive or negative. During the year there were 20 cases notified which had not been confirmed by bacteriological examination. In several cases the germs have persisted in the throats of convalescents for considerable periods, when to all appearances the patient had quite recovered. As periodic visitations for the purpose of taking swabs became irksome to the doctor and expensive to the patient, arrangements have been made for the Lady Sanitary Inspector to be appointed to assist in this work. It has to be remembered, however, that the doctor's duty to the patient and the household cannot be considered completed until the throat of the sufferer is free from the disease. One case sent in to hospital as Diphtheria was found on arrival to be Scarlet Fever. The nurse fortunately recognised the disease and at once removed the patient to the Scarlet Fever pavilion. No cross infection resulted. The greater preponderance of cases of Diphtheria among European females is again shown, out of 81 cases there being 50 females and 31 males. Of the 85 cases occurring during the year, 25 were removed and treated at the Infectious Diseases Hospital, Congella. The principle adopted is that if the patient is so housed as to possibly spread infection to others, the case is removed to hospital and treated free of charge.

SCARLET FEVER.

There have been fewer cases of Scarlet Fever during the past year than for the three preceding years, and it will be noticed that during the past six years not a single death has occurred among the 156 cases that were notified. The type of this disease usually prevalent in Durban is of a mild nature, but occasionally a fairly severe form appears, and complications such as nephritis, ear and granular troubles arise in these cases. Three of the cases reported during the past year were treated at the Infectious Diseases Hospital.

NON-NOTIFIABLE INFECTIOUS DISEASES.

During the past year the following non-notifiable infectious diseases have been very prevalent in Durban, viz., Measles, Whooping Cough, Chickenpox, Influenza, etc. It is impossible even to estimate the number of cases of these diseases that occurred, but Chickenpox and Measles were extremely rife for part of the year. Statistics show that there were 5 deaths from Measles, 5 from Whooping Cough, and 1 from Influenza.

TABLE OF CASES OF NOTIFIABLE INFECTIOUS DISEASES
ARRANGED ACCORDING TO RACES, 1915-16.

Disease.	Europeans.		Natives.		Asiatics.		Total.	
	Boro'.	Imp.	Boro'.	Imp.	Boro'.	Imp.	Boro'.	Imp.
Smallpox	0	0	0	1	0	0	0	1
Diphtheria	81	4	0	0	4	0	85	4
Scarlet Fever	13	2	0	0	0	0	13	2
Enteric Fever	90	38	2	2	2	1	94	41
Puerperal Fever	2	0	0	0	2	0	4	0
Anthrax	1	0	0	0	0	0	1	0
Phthisis	25	35	10	16	19	18	54	69
Totals	212	79	12	19	27	19	251	117
Treated in Hospital	85	51	3	12	7	12	95	75
Treated at home or privately	127	28	9	7	20	7	156	42

The following also are Notifiable Infectious Diseases, but there have been no cases during the past year:—

Plague, Cholera, Membranous Croup, Leprosy, Typhus Fever, Relapsing Fever, Glanders, Rabies, Malta Fever, Yellow Fever, Cerebro-Spinal-Meningitis, Sleeping Sickness.

TABLE SIMILAR TO THE FOREGOING FOR COMPARISON CONTAIN-
ING NUMBER OF NOTIFICATIONS OF PREVIOUS YEAR, 1914-1915.

Disease.	Europeans.		Natives		Asiatics		Total	
	Boro'.	Imp.	Boro'.	Imp.	Boro'.	Imp.	Boro'.	Imp.
Plague	0	0	0	0	0	0	0	0
*Dysentery	53	11	16	12	5	3	74	26
Smallpox	0	0	0	0	0	0	0	0
Diphtheria	109	5	1	0	4	0	114	5
Erysipelas	8	1	0	1	0	0	8	2
Scarlet Fever	22	1	0	0	0	0	22	1
Enteric Fever	41	35	13	3	2	1	56	39
Puerperal Fever	1	1	0	0	3	0	4	1
Leprosy	0	0	0	0	0	1	0	1
Phthisis	28	35	17	34	30	36	75	105
Totals	262	89	47	50	44	41	353	180
Treated in Hospital	74	61	29	36	14	32	117	129
Treated at home or privately	188	28	18	14	30	9	236	51

(*For nine months ending April, 1915.)

ENTERIC FEVER.

The following table shows the total number of cases of Enteric Fever notified and deaths recorded during the past six years:—

Year	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16	
						Borough	Imported
Cases	55	123	188	174	95	94	41
Deaths	4	18	19	34	9	10	3

Case Mortality: 10.638 per cent.

Case Incidence per 1,000 of Population = 1.18.

RACE AND SEX DISTRIBUTION.

	Male.	Female.	Total.	Deaths.
European	48	42	90	8
Native	1	1	2	2
Asiatic	—	2	2	—
	—	—	—	—
	49	45	94	10
	—	—	—	—

WARD DISTRIBUTION.

Wards	1	2	3	4	5	6	7	Impt.	Total.
Cases	11	7	8	10	36	10	12	41	135

SIZE OF HOUSE.

Rooms	1	2	3	4	5	6	7	Over 7	Institution.	Total
European	8	5	8	19	23	7	13	4	5	90
Native	1	1	0	0	0	0	0	0	0	2
Asiatic	1	1	0	0	0	0	0	0	0	2
Totals	10	7	8	19	23	7	13	4	5	94

The houses of 90 cases were provided with water closets, and at 4 the pail system was in use.

WIDAL REACTION.

During the year 118 specimens of blood from suspected cases of Enteric and Paratyphoid have been submitted to me for examination. Of these 12 were positive and 106 negative.

AGE DISTRIBUTION—EUROPEANS.

Age	...	0-5	5-10	10-15	15-20	20-25	25-35	35-45	45-55	55-65	Total.
Male	..	7	8	8	4	4	9	6	1	1	48
Female		1	7	5	8	6	11	4	0	0	42
Totals		8	15	13	12	10	20	10	1	1	90

SANITARY CONDITIONS.--The sanitary conditions existing at houses where cases resided were:—

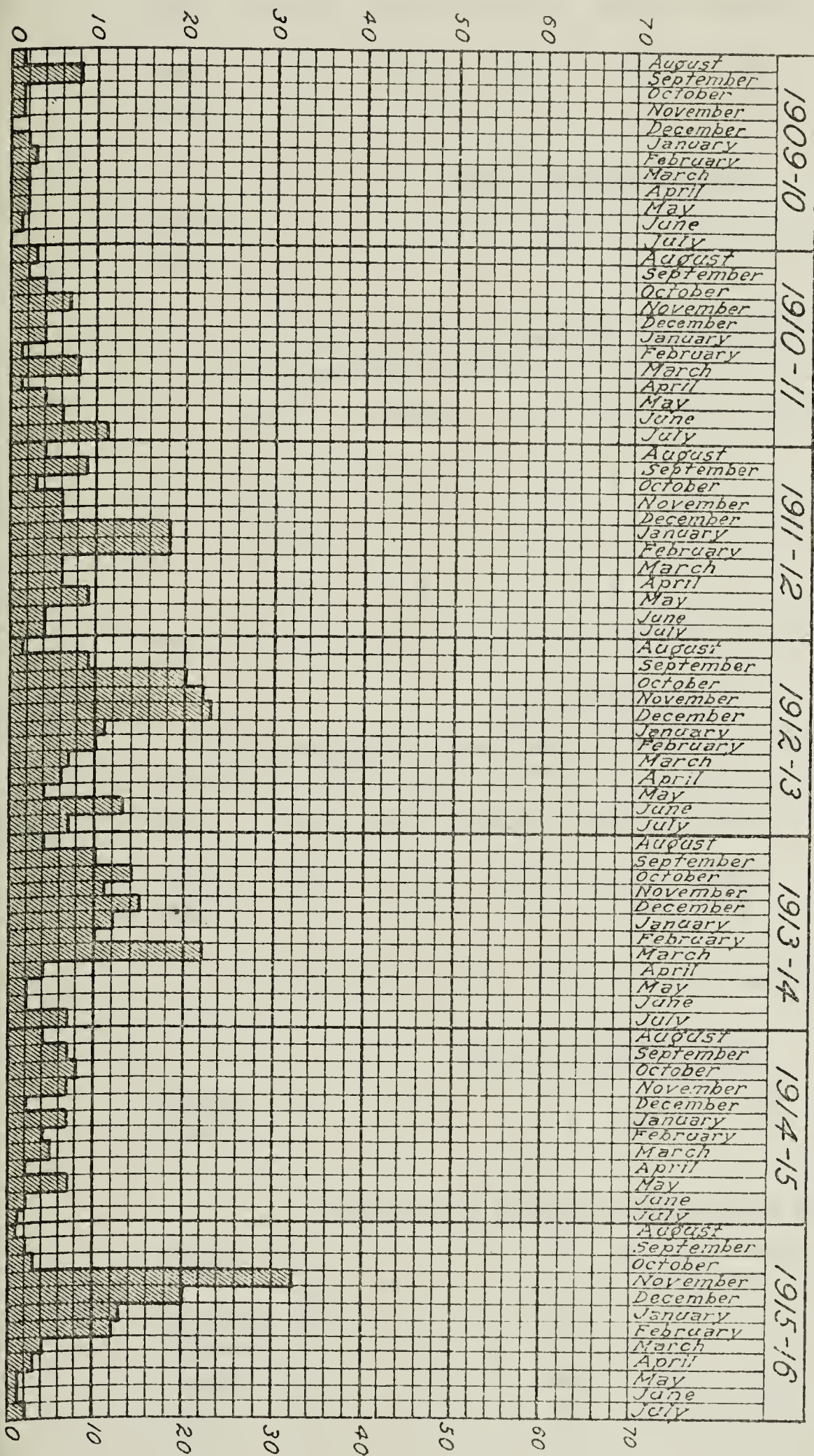
Good.	Fair.	Poor.	Bad.	Total.
28	53	12	1	94

CLEANLINESS. So far as cleanliness of the dwellings and the surroundings were concerned, they might be classed as:—

Clean.	Fair.	Dirty.	Total.
70	21	3	94

the past seven years:—

ENTERIC FEVER NOTIFICATIONS.



SCARLET FEVER.

The following table shows the cases notified and deaths from Scarlet Fever registered during the past six years:—

Year.	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16	
						Borough	Imported
Cases	14	12	27	65	23	13	2
Deaths	0	0	0	0	0	0	0

WARD DISTRIBUTION.

Wards	1	2	3	4	5	6	7	Impt.	Total.
Cases	1	1	3	1	2	0	5	2	15

AGE AND SEX DISTRIBUTION (EUROPEANS).

Age	Under 5	5-10	10-15	15-20	20-25	Total
Male	3	1	1	0	0	5
Female	1	5	1	1	0	8
Totals	4	6	2	1	0	13

DIPHTHERIA.

The following table shows the cases notified and deaths from Diphtheria registered during the past six years:—

Year	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16	
						Borough	Imported
Cases	46	130	160	127	119	85	4
Deaths	2	11	11	6	9	4	1

RACE DISTRIBUTION.-- Europeans, 81; Asiatics, 4.

WARD DISTRIBUTION.

Wards	1	2	3	4	5	6	7	Impt.	Total.
Cases	4	9	21	8	17	9	17	4	89

NUMBER OF ROOMS IN INFECTED HOUSES.

Rooms.	1	2	3	4	5	6	7	Over 7	Institution.	Total
European	9	3	3	15	25	11	2	8	1	77
Coloured	0	0	0	4	0	0	0	0	0	4
Native	0	0	0	0	0	0	0	0	0	0
Asiatic	3	0	1	0	0	0	0	0	0	4
Totals	12	3	4	19	25	11	2	8	1	85

In the houses of 82 water closets were in use, and in 3 cases the pail system was in use.

MONTHLY DISTRIBUTION OF CASES AND DEATHS.

	1915					1916							
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March.	April.	May.	June.	July.	Total.
Cases	7	6	7	4	5	4	4	22	6	8	5	7	85
Deaths	0	0	1	0	0	1	1	0	0	0	1	0	4

AGE DISTRIBUTION OF CASES.

Age	0—5	5—10	10—15	15—20	20—25	25—35	35—45	45—85	TOTAL
European Males	11	15	4	0	0	1	0	0	31
European Females	10	17	9	3	4	4	3	0	50
Native and Asiatic Males	3	0	0	0	0	0	0	0	3
Native and Asiatic Females	1	0	0	0	0	0	0	0	1
TOTALS	25	32	13	3	4	5	3	0	85

SANITARY CONDITIONS.—The sanitary conditions existing at houses where cases resided were:—

Good.	Fair.	Poor.	Bad.	Total.
18	52	15	0	85

CLEANLINESS.—So far as cleanliness of the dwellings and surroundings was concerned, they may be classed as:—

Clean.	Fair.	Dirty.	Total.
59	26	0	85

TUBERCULOSIS.

TABLE 1.

YEAR.	EUROPEANS.				NATIVES.				ASIATICS.			
	All Tuberculosis.		Phthisis.		All Tuberculosis.		Phthisis.		All Tuberculosis.		Phthisis.	
	Deaths.	Rate per 1,000 of Pop.	Deaths.	Rate per 1,000 of Pop.	Deaths.	Rate per 1,000 of Pop.	Deaths.	Rate per 1,000 of Pop.	Deaths.	Rate per 1,000 of Pop.	Deaths.	Rate per 1,000 of Pop.
1909-10	19	·59	18	·56	8	·49	6	·36	34	2·11	31	1·92
1910-11	21	·61	18	·52	7	·40	2	·11	28	1·64	25	1·47
1911-12	26	·71	23	·63	5	·27	5	·27	54	3·09	49	2·8
1912-13	19	·53	18	·50	7	·34	5	·25	31	1·72	26	1·44
1913-14	22	·6	20	·55	6	·27	2	·1	27	1·47	19	1·03
1914-15	16	·43	13	·35	13	·62	9	·43	23	1·22	15	·8
1915-16	25	·66	20	·51	12	·58	8	·38	22	1·13	13	·68

TABLE 2.—DEATHS FROM ALL FORMS OF TUBERCULOSIS
SINCE 1909.

	1909-10	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16	Total Deaths for 7 Years.	Annual Average Mortality.
European ...	19	21	26	19	22	16	25	148	21
Native ...	8	7	5	7	6	13	12	58	8
Asiatic ...	34	28	54	31	27	23	22	219	31
Totals ...	61	56	85	57	55	52	60	425	61

PHTHISIS.

EUROPEANS.

TABLE 3.—DISTRIBUTION OF NOTIFIED CASES AND DEATHS
IN WARDS.

Wards	...	1	2	3	4	5	6	7	Imported.	Total
Cases	...	2	3	4	5	3	1	7	35	60
Deaths	...	1	2	4	1	3	3	6	16	36

TABLE 4.—AGE AND SEX DISTRIBUTION OF NOTIFIED CASES
AND DEATHS.
EUROPEANS.

Under 1	1—5	5—10	10—15	15—20	20—25	25—35	35—45	45—55	55—65	65—85	Total.
M F	M F	M F	M F	M F	M F	M F	M F	M F	M F	M F	M F
Cases											
0 0	0 0	0 0	0 0	0 1	2 2	3 4	7 2	2 0	2 0	0 0	16 9
Deaths											
0 0	0 0	0 0	0 0	0 0	0 2	3 1	7 1	4 0	1 0	0 1	15 5

TABLE 5.—DISTRIBUTION OF NOTIFIED CASES AND DEATHS
IN WARDS.
NATIVES.

Wards ...	1	2	3	4	5	6	7	Imported.	Total.
Cases notified ...	1	1	1	1	3	2	1	16	26
Deaths ...	0	1	0	1	2	4	0	10	18

TABLE 6.—DISTRIBUTION OF NOTIFIED CASES AND DEATHS
IN WARDS.
ASIATICS.

Wards ...	1	2	3	4	5	6	7	Imported.	Total.
Cases notified ...	1	0	0	4	3	8	3	18	37
Deaths ...	4	0	0	3	0	5	1	8	21

TABLE 7.—SIZE OF HOUSE.

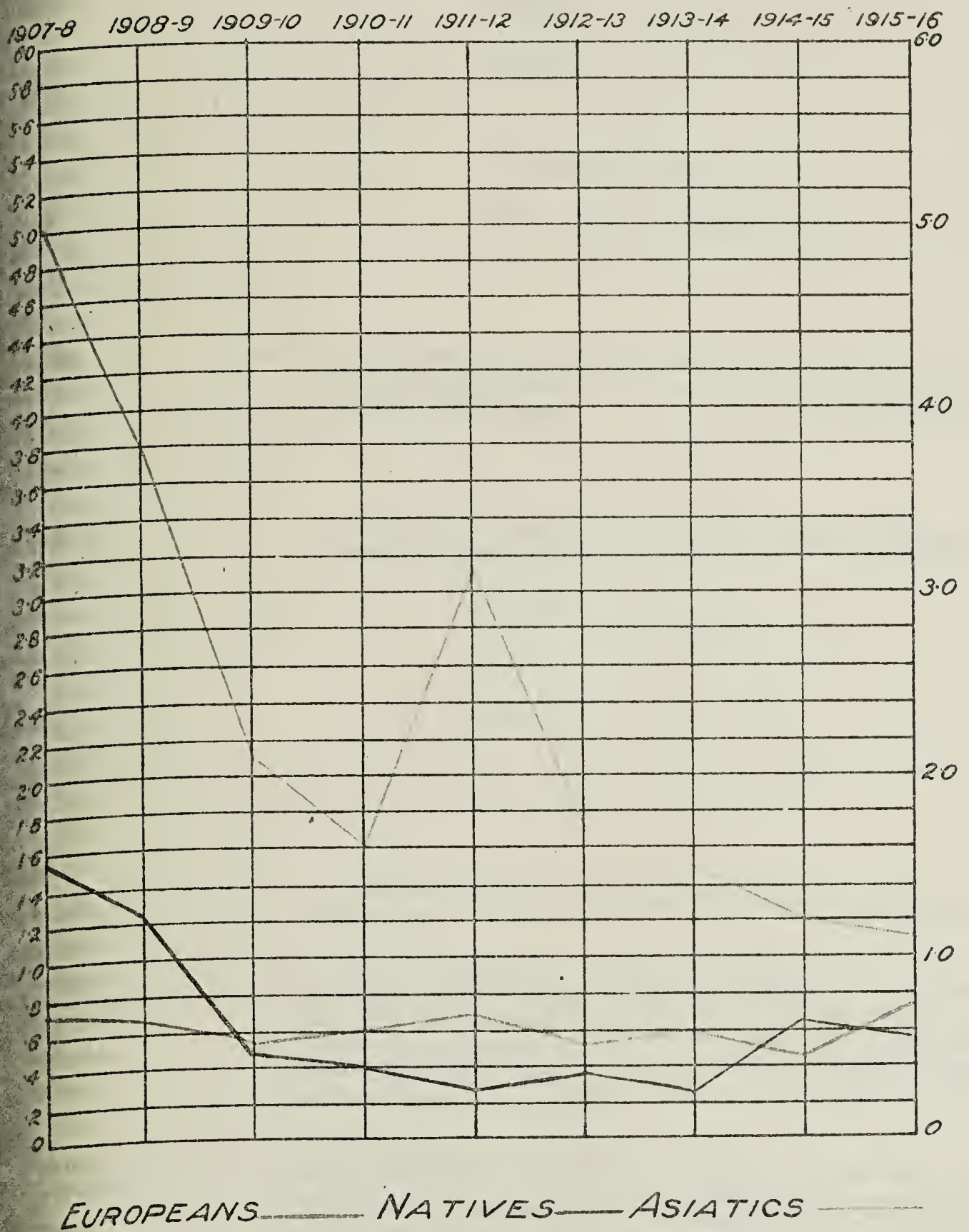
Rooms ...	1	2	3	4	5	6	7	Over 7	Institution.	Total.
European ...	6	2	0	6	9	0	0	1	1	25
Native ...	8	0	0	0	0	0	0	0	2	10
Asiatic ...	14	5	0	0	0	0	0	0	0	19
Totals ...	28	7	0	6	9	0	0	1	3	54

TABLE OF NOTIFICATIONS OF TUBERCULOSIS ARRANGED IN
MONTHS AND RACES.

			Europeans.		Natives.		Asiatics.		TOTAL.	
			Boro.	Imp.	Boro.	Imp.	Boro.	Imp.	Boro.	Imp.
1915										
August	...	...	0	2	0	3	3	2	3	7
September	...	...	2	7	2	1	0	2	4	10
October	...	...	3	5	0	4	1	4	4	13
November	...	...	0	2	1	1	4	1	5	4
December	...	...	1	3	1	1	0	1	2	5
1916										
January	...	...	3	1	1	2	1	0	5	3
February	...	...	3	1	1	2	0	0	6	3
March	...	...	3	1	1	0	2	0	6	1
April	...	...	2	4	0	0	2	4	4	8
May	...	...	0	3	2	1	2	0	4	4
June	...	...	2	1	1	0	2	0	5	1
July	...	...	4	5	0	1	2	4	6	10
Totals	...	...	25	35	10	16	19	18	54	69

DEATH RATE FROM TUBERCULOSIS.

Chart showing the Death Rate per 1 000 from Tuberculosis amongst Europeans, Asiatics and Natives during the past nine years:—



TUBERCULOSIS BUREAU.

The following are the figures for the number of new patients examined at the Bureau during the past year ending 31st July, 1916:—

Europeans	98
Coloured	14
Natives	24
Asiatics	41
	<hr/>
	177
Attendances by old cases	227
	<hr/>
Total number of attendances	404
	<hr/>

During the year 25 fresh cases of Pulmonary Tuberculosis amongst European burgesses of the Borough have been notified as compared with 28 in the previous year.

Of the new cases, the following number were found to be suffering from Pulmonary Tuberculosis:—

Europeans and Coloured	42
Natives	11
Asiatics	7
	<hr/>
	60
	<hr/>

The remainder in each case were either negative cases or cases requiring observation.

At first sight the number of positive cases, 60 out of 177 new cases examined, would appear to be unusually high, but it must be remembered that they are selected cases for the most part, many being sent on to the Bureau by practitioners. In some instances they are known to be suffering from Tuberculosis and suggestions are asked for as to treatment; in others aid in diagnosis is sought.

In addition to doing the routine work of the Bureau, the Assistant Medical Officer of Health, is not infrequently requested by practitioners to meet them in doubtful cases. Moreover cases on the Bureau books requiring medical attention in their homes are, when they apply, visited by him, provided there is no doctor attending the case.

It is hoped that in the future more contacts of notified cases of Tuberculosis will present themselves for examination at the Bureau. At present all new cases are visited on notification by the Special Sanitary Inspector, and where necessary on his report by the Assistant Medical Officer of Health.

The need for Sanatorium accommodation for patients suffering from Pulmonary Tuberculosis still remains a pressing one before the full value for the work done at the Bureau can be obtained.

INFECTIOUS DISEASES HOSPITAL.

During the past year, 40 cases of infectious disease have been isolated at the Infectious Diseases Hospital, Congella, viz.:—

DISEASES	European		Coloured		Native		Asiatic		Total	
	B.	I.	B.	I.	B.	I.	B.	I.	B.	I.
Scarlet Fever ...	3	0	0	0	0	0	0	0	3	0
Diphtheria ...	19	2	1	0	0	0	3	0	23	2
Chicken Pox ...	0	0	0	0	11	0	0	0	11	0
Measles ..	0	0	0	0	1	0	0	0	1	0
Total ...	22	2	1	0	12	0	3	0	38	2

SCARLET FEVER.

AGE AND SEX DISTRIBUTION.

Ages ...	0—5	5—10	10—15	15—20	20—25	Total
Male ...	0	1	0	0	0	1
Female ..	1	0	1	0	0	2
Total ...	1	1	1	0	0	3

DEATHS.—No deaths from Scarlet Fever have taken place during the year.

The average length of stay in hospital for the above three cases was 32 days.

One patient was admitted to hospital as a case of Diphtheria, but was found on examination to be a case of Scarlet Fever. One patient underwent an operation for removal of tonsils before being discharged.

DIPHTHERIA.

AGE AND SEX DISTRIBUTION.

Ages ...	0—5	5—10	10—15	15—20	20—25	35—40	Total
Male ...	5	3	2	0	0	0	10
Female ..	3	4	3	2	1	2	15
Total ..	8	7	5	2	1	2	25

During the previous year, 17 cases of Diphtheria were isolated at the hospital.

DEATHS. There were three deaths from Diphtheria during the year at the hospital. In two of the cases Tracheotomy was performed; one patient died a few hours after the operation, the other was moribund on arrival and died almost immediately, before the operation was completed. The third death occurred in a patient who, after being in hospital for twelve days and all local signs of the disease having disappeared, developed Hemiplegia—embolic and died within twelve hours. Infantile Hemiplegia is a somewhat rare affection and I can only find one case following Diphtheria recorded.

One patient on whom Tracheotomy was performed made a good recovery.

The average length of residence in hospital for the above cases of Diphtheria was 17 days.

The various types of this disease from which the patients were found to be suffering were:—Faucial 20, Laryngeal 3, Nasal 2.

All cases show three successive negative swabs before discharge.

For 52 days during the past year, there were no patients under treatment at the hospital.

HOSPITAL.

GENERAL.—It will be noticed that the imported cases of infectious disease amount to a considerable proportion of the total numbers: during 1915-16, one-third of the infectious disease cases were imported. The imported cases of Enteric Fever amount to 30.3 per cent. of the total cases, and Phthisis 56.1 per cent.

One of the most pressing public health requirements of this Municipality is adequate and proper hospital accommodation. The present hospital buildings are inadequate to deal with cases of infectious disease occurring in this Borough. Numerous complaints have been received during the year from residents, hotel and boarding-house keepers, visitors, etc., and a deputation from the Durban Medical Society interviewed the Public Health Committee to express their views on the subject.

I have been requested by the Public Health Committee to submit an exhaustive report on the incidence of infectious disease in the Borough, in order to satisfy the Town Council as to the necessary requirements for efficiently dealing with such cases, together with the estimate of probable cost, maintenance, staff, etc., and the revenue that may be expected.

During the past year the Town Council resolved to isolate in the wood and iron buildings at Congella—used during the Boer War as a hospital for war prisoners—all natives discovered to be suffering from infectious disease in the Borough, the cost of which was to be a charge against the Native Administration Fund. Since the necessary structural alterations were completed, natives have been isolated and treated in this building.

The Horse Ambulance Wagon was handed over to this Department during the past year for the purpose of transporting cases of infectious disease.

BACTERIOLOGICAL LABORATORY.

The following examinations have been made in the Laboratory attached to the Public Health Department during the past year:—

TABLE 1.

	Negative.	Positive.	Total.
Tubercle Bacilli	187	64	251
Diphtheria Bacilli	524	211	735
Widal Reaction for Enteric Fever ...	63	5	68
Serum Reaction for Paratyphoid Fever	43	7	50
Gonococci	13	6	19
Malaria	16	1	17
Malta Fever (Serum Reaction)	13	3	16
Bilharzia	4	0	4
Pneumococci	2	1	3
Plague	1	0	1
Amoeba Histolytica	2	1	3
Ringworm	1	0	1
Anthrax	1	0	1
Urine for Casts	0	1	1
Urine for Sugar	1	0	1
Totals	871	300	1,171

TOTAL EXAMINATIONS FOR THE PAST EIGHT YEARS.

1908-9	1909-10	1910-11	1911-12	1912-13	1913-14	1914-15	1915-16
187	226	323	*1,970	1,367	1,324	1,266	1,171

* Chiefly Plague Examinations.

With regard to the above figures in Table 1, since there were 94 cases of Enteric Fever and Paratyphoid Fever notified in the year and only 12 blood examinations found to give a positive result when tested, it would seem that practitioners do not utilise the facilities offered by the laboratory to the best advantage; it must be remembered, however, that many specimens are sent to other laboratories.

TABLE 2.

Showing number of examinations carried out each month and the results in certain diseases during the past two years.

1914-1915	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July
Tubercle Bacilli { N	22	14	18	13	21	18	17	28	23	11	15	19
{ P	8	9	8	4	7	13	6	8	7	5	3	3
Diphtheria { N	25	47	28	28	32	20	23	20	49	33	103	129
{ P	4	9	6	10	10	9	14	6	13	16	64	55
Enteric and Para-typhoid Fever { N	4	3	3	2	3	4	5	12	2	6	4	2
{ P	0	0	0	0	0	0	1	1	2	0	0	1
1915-1916	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	March	April	May	June	July
Tubercle Bacilli { N	20	22	16	16	9	13	14	16	12	14	13	22
{ P	5	7	3	4	4	2	5	5	6	7	12	4
Diphtheria { N	87	32	37	28	26	20	13	78	74	40	37	52
{ P	40	9	11	9	14	10	13	33	28	19	14	11
Enteric and Para-typhoid Fever { N	1	4	1	30	13	18	19	9	3	4	1	3
{ P	0	1	0	0	0	2	5	1	1	0	1	1

N. = Negative. P. = Positive.

In respect of Table 2, no comment suggests itself as regards the figures for Tubercle Bacilli and Diphtheria examinations, but the large number of negative Enteric and Paratyphoid examinations in certain months is interesting. Certain other factors which have been noted during the year suggest the possibility that there is a febrile illness which occurs in Durban, which is neither Enteric nor Paratyphoid Fever, but which has certain symptoms in common with these diseases. Moreover in these cases, tests for Malaria and Malta Fever have been negative and the typical signs of Dengue Fever are absent. The point would seem to require investigation.

WATER EXAMINATIONS, ETC.

In addition to the routine bacteriological examinations above detailed, there has this year been undertaken the examination bacteriologically of a considerable number of samples of the Durban water. These examinations were commenced in November, 1915, and the samples have been taken from various parts of the water system both inside and outside the Borough. Many laboratory experiments have also been carried out as a necessary preliminary and adjunct to these tests. In all 64 samples have been examined during these nine months and the complete results are embodied in a report which will be shortly completed.

In addition to these water examinations which have necessitated a considerable increase in the work of the laboratory, the Rideal-Walker Coefficient Test for disinfectants has been performed on eight occasions on samples received from the Stores Department.

Seven samples of Chloride of Lime have also been examined for the percentage of available Chlorine therein contained.

DISINFECTING STATION.

The following is a summary of the work performed at the Disinfecting Station during the past year:—

DISINFECTIONS.

Months	Houses or Rooms	Mattresses	Blankets	Sheets	Articles of Clothing	General Articles	Totals
1915							
August ...	39	44	96	148	590	618	1535
September ...	46	83	138	128	639	777	1811
October ...	43	46	64	169	340	369	1031
November ...	42	69	95	203	441	644	1494
December ...	66	97	130	224	688	886	2091
1916							
January ...	42	57	95	162	582	625	1563
February ...	41	58	76	113	461	677	1426
March ...	45	60	72	234	837	855	2103
April ...	27	42	77	159	526	566	1397
May ...	36	32	52	63	485	559	1227
June ...	26	37	94	72	592	492	1313
July ...	31	49	100	117	583	840	1720
Totals ...	484	674	1089	1792	6764	7908	18711
Previous Year's Work ...	515	722	1391	1487	7464	10169	21748

List of Articles Washed and Disinfected for various

CORPORATION DEPARTMENTS.

Departments.	Towels	Blankets	Felts	Bandages	Coats	Trousers	Cushion Covers	Table Cloths.	Totals
Main Police Station	120	324	466	...	...	...	...	...	910
Sanitary Department	4,854	...	...	...	...	...	...	...	4,854
Borough Engineer ...	389	...	...	...	...	...	...	...	389
Electrical Engineer	346	...	...	...	...	...	...	...	346
Tramways Dept. ...	385	...	...	...	...	...	...	...	385
Water Department...	150	...	...	...	...	...	...	...	150
General Stores Dept.	...	...	...	...	22	22	...	108	152
Municipal Abattoir...	151	...	...	...	240	109	...	...	500
Mayor's Motor Car...	...	...	...	...	55	32	526	...	613
Fire St'n Ambulance	7	321	...	28	...	...	...	...	356
Town Council ...	220	...	...	...	...	...	...	...	220
Totals ...	6,622	645	466	28	317	163	526	108	8,875
Previous Year ...	4,733	506	331	50	144	...	306	...	6,070

The following tables show the WASHING DONE during the past year in connection with the Public Baths, West Street, and the Beach Bathing Enclosure and Swimming Baths:—

PUBLIC BATHS; WEST STREET.

Months.	Towels.	Ladies' Costumes.	Drawers.	Ladies' Sheets	Plain Sheets.	Other Articles	Totals.
1915							
August ...	3750	107	36	102	18	43	4056
September ...	2360	76	...	56	28	40	2560
October ...	2850	84	50	48	17	42	3091
November ...	2880	36	...	54	10	44	3024
December ...	2470	55	40	50	25	51	2691
1916							
January ...	2860	53	60	70	21	40	3104
February ...	2874	42	50	75	29	37	3107
March ...	2737	53	...	78	15	47	2930
April ...	1600	32	...	63	12	46	1753
May ...	1971	47	...	67	23	43	2151
June ...	2562	75	...	94	25	57	2813
July ...	4131	194	...	180	43	41	4589
Totals ...	33045	854	236	937	266	531	35869
Previous Year	38290	619	78	499	263	502	40251

OCEAN BEACH BATHING ENCLOSURE AND OPEN AIR
SWIMMING BATH.

Months.	Towels.	Ladies' Costumes.	Gent's Costumes	Drawers.	Totals.
1914					
August	12230	1625	6917	2972	23744
September	6770	938	3795	2014	13517
October	6000	845	3190	2885	12920
November	7040	915	3350	3820	15125
December	9780	1564	4016	4240	19600
1915					
January	11600	2213	7020	6205	27038
February	11940	1610	7934	7675	29159
March	10980	1250	6360	5678	24268
April	10840	1769	7082	6379	26070
May	7240	987	4580	4155	16962
June	7880	955	5135	4725	18695
July	14520	1914	8926	7446	32806
Totals	116820	16585	68305	58194	259904
Previous Year ...	120565	15829	66467	21815	224676

INFECTIOUS DISEASE PATIENTS REMOVED BY AMBULANCE
TO HOSPITALS.

The following table shows the number of patients removed to Hospitals during the past year:—

Hospitals.	Europe'n	Coloured	Native	Asiatic	Total.
Infectious Diseases Hospital	23	1	13	3	40
Addington Hospital	18	3	—	—	21
The Sanatorium	5	—	—	—	5
Military Base Hospital... ..	4	—	—	—	4
Berea Nursing Home	1	—	—	—	1
Other Nursing Homes	1	—	—	—	1
	52	4	13	3	72

MEDICAL OFFICER OF HEALTH.

STAFF.

The constitution of the Staff is as follows:—

Medical Officer of Health	P. Murison.
Assistant Medical Officer of Health	N. H. Walker.
Chief Inspector of Nuisances	W. C. Daugherty.
Special Sanitary Inspector	R. Walker.
Assistant Inspectors of Nuisances	{ J. Kendall. T. Hyslop. W. Thomson. J. Wood. A. Kelso. W. G. Pearce. W. G. Smith. F. W. Holmes.
Clerk	E. Posner.
Clerk	A. McIver. ✓
Clerk	F. W. Burne. ✓
Office Messenger	J. Kirk.
Superintendent, Disinfecting Station	E. Schulthess.
Assistant Disinfector	C. D. Morning.
Municipal Nurse, Congella Hospital	P. G. Salmon.
Housekeeper	K. Salmon.

P. MURISON, M.D., B.Se., D.P.H.,

Medical Officer of Health.

